Probing the Evolutions and Proliferations of Beatmaking Styles in Hip Hop Music

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Thesis submitted in fulfilment of the degree of Doctor of Philosophy

International Centre for Music Studies

Newcastle University

May 2020

Abstract

This PhD thesis investigates how a multiplicity of distinct styles of hip hop beats have materialised since hip hop music's initial emergence from New York City in the 1970s.

From the outset, I assert that the beat, that is, the musical component that might be thought of as the 'backing track' of a hip hop record or live performance, should be considered just as fundamental as an MC's vocals. I proceed to observe that while hip hop can be – and usually is – invoked to mean a single genre, examples of hip hop beats from disparate regions and periods can sound radically different from one another, exhibiting divergent sonic signatures and compositional approaches. My research seeks to discover and engage critically with the factors that have caused this stylistic diversity.

A musicological inquiry that eschews the priorities and standardisations of European-derived musical sensibilities in favour of a meaningful regard for hip hop culture's aesthetics and creative strategies is pursued as I analyse a selection of significant region-specific and period-specific beat styles, and subsequently, a combination of online ethnographic work and a creative practice element leads my survey on the present state of underground beatmaking practice.

Drawing from theories and applications of dialectics, I find that the history of hip hop beats and beatmaking can be apprehended by scrutinising the relationship between underground musical movements and the agents of the capitalist culture industry, with these two conflicting sides effectively working in tandem to ensure hip hop's continued position at the vanguard of modern popular music. Crucially, I suggest that hip hop beatmaking constitutes a truly revolutionary form of composition that exposes and explodes the latent potentials of music technologies, both established and novel.

Dedicated to the memory of Gordon Bridgewater.

Acknowledgements

Throughout my time as a student at Newcastle University, at both undergraduate and postgraduate levels, Dr. Will Edmondes has supported and inspired me in my academic work in ways much too numerous and profound for me to detail in brief here. Thank you, Will, for pushing me to get deeper into this stuff, and for being a real one. I can say with confidence that I am a better and sharper person for knowing you. I would also like to thank Dr. Goffredo Plastino for his keen critical insight. I have been very fortunate to have had such a solid supervision team.

Respect is due to both Dr. Craig Pollard and Dr. Hannabiell Sanders for being brilliant colleagues while we taught together on Newcastle University's 'Elements of Hip Hop' module – I hope that we can work together some more in the future.

Thanks to the staff at Culture Lab, Newcastle University for accommodating me as a resident of the Digital Cultures Studio; having access to such a great place to work from was something that I never took for granted.

Over the course my research project, I was very humbled to be able to present my research at the second meeting of the European Hip Hop Studies Network in 2019 and to have my article 'Play on Any Platform: Between Hip-Hop Beatmaking and Video Games' published in the UK Annual of Postgraduate Hip Hop Studies. Thank you to all who made these things possible for me.

I owe a considerable debt to all the beatmakers I interviewed for how they shared their knowledge with me. The conversations we had would often make me want to put everything down and make a beat or two, such was their infectious enthusiasm and creative energy.

Finally, I must thank my wife Hannah for always helping me endure the hard times and enjoy the good times. Here's to more of the latter.

Contents

Hexagrammar Tracklist

1 – 1	11 – 45
2 – 9 to 61	12 – 32 to 28
3 – 36 to 62	13 – 31
4 – 30 to 21	14 – 44 to 57
5 – 63 to 22	15 – 34 to 5
6 – 14 to 9	16 – 2
7 – 10	17 – 14 to 1
8 – 43 to 29	18 – 33 to 12
9 – 59 to 6	19 – 56 to 22
10 – 49 to 36	20 – 47 to 40

Available to download from:

https://michaelphilipbridgewater.bandcamp.com/album/hexagrammar

List of Figures

Introduction

Today, the global significance of hip hop hardly requires vindication. Since its codification into a form of recorded popular music at the end of the 1970s, hip hop has found itself exercising an immense influence on contemporary music at large. Aside from the aggressive marketing strategies of the large record companies who have sought to capitalise on it, the reasons behind the enormous popularity – and therefore commercial supremacy – of hip hop music lie in its undeniable immediacy, penetrating swiftly and directly into the nexus of human responses to aural stimuli, as illustrated amply by the poet and musician Saul Williams:

> There is no music more powerful than hip-hop. No other music so purely demands an instant affirmative on such a global scale. When the beat drops, people nod their heads, "yes," in the same way that they would in conversation with a loved one, a parent, a professor, or minister. Instantaneously, the same mechanical gesture which subsequently, releases increased oxygen to the brain and, thus, broadens one's ability to understand, becomes the symbolic and actual gesture that connects you to the beat.[1]

What, then, *is* hip hop? While many hip hop fans might find in this basic ontological question an opportunity to pin their colours to the mast and claim that hip hop is, above all, an 'attitude' or 'a way of life', something that should be *lived* more than merely experienced,[2] most people who are at least vaguely familiar with it would likely describe it as a 'kind of music' or 'genre'. If we are to accept the latter designation, then further questions arise, principally: 'what does hip hop sound like?' This is where hip hop first starts to exhibit one of its most salient, albeit oblique characteristics: its tendency to defy fixity and evade finite categories. 'Hip hop' can mean one of several very different sounding musical styles depending on who you are asking, from the grainy, almost cubist refiguring of hard funk that is 'golden age' New York City rap to the gleaming, transparently digital soundscapes of modern quasi-mainstream trap. Indeed, in this regard, the label 'hip hop' has more in common with another amorphous tradition existing within black American music – 'jazz'. A large part of what initially provoked me to

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[1] Saul Williams, *The Dead Emcee Scrolls: The Lost Teachings of Hip-Hop* (New York, NY: Pocket Books, 2006), xi.
[2] For an example that validates this, Houston's 'Screw music' scene of the 1990s integrated the mixtape releases of DJ Screw into its car-oriented social culture in a demonstrably uncontrived manner. I explore this further in Chapter 5 of this thesis.

consider pursuing a research project on hip hop music was this dizzying degree of diversity – the almost matchless ambiguity of the term 'hip hop', as so often it is invoked offhandedly.

Much of what the theoretical aspects of my thesis pivot on is to do with the dialectical relationship that I perceive between underground hip hop culture and the capitalist culture industry. Presenting a rather bleak outlook, Michael Denning claims:

> An investment theory of culture mimics the capitalist culture it critiques. If all cultural activity is a means of accumulating cultural capital, there is no place for a cultural politics. The consequences of "cultural studies" as a project are meager indeed.[3]

The suggestion here is that to study a facet of popular culture is to 'invest' in it, wielding academic capital for the purposes of accumulating cultural capital, in a process comparable to the manner in which record companies appropriate underground musical developments. To answer this, I wish to assert that my engagement with hip hop studies is not reducible to something as cynical as a furthering of my own standing as an academic. Instead, this thesis constitutes a humble attempt to highlight the accomplishments of hip hop's musical and technological innovators who have operated in the face of America's racist machinations, both the overt and the hidden, thus offering valuable ideas for people to rise above their marginalisation through free and self-determining creative activity. Moreover, due to hip hop's intrinsic counter-fixity, its cultural practice is not simply subject to recuperation – it *is* recuperation, and as such, it always finds a way to break free from any kind of institutionalisation or standardisation through its spirit of resourcefulness and its openness towards evolution, while simultaneously honouring its origins. As beatmaker Large Professor ventures:

> Hip hop is like a tree to me […] it's still growing. There're branches. There're all of these branches, and there're leaves that are getting the light right now. But the root is what it is. So, I hold on to a lot of the root, the root things […] 'cause we did a lot with a little.[4]

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[3] Michael Denning, 'The End of Mass Culture', *International Labor and Working-Class History*, 37 (Spring, 1990), 4-18 (12).
[4] Ali Shaheed Muhammad and Frannie Kelley, 'Large Professor, Part 1: 'We're Living In The World of Hip-Hop'', *Microphone Check : NPR*, 2015, https://www.npr.org/sections/microphonecheck/2015/07/29/424717271/large-professor-part-1-were-living-in-the-world-of-hip-hop (14th June, 2017).

The continuing expansion of hip hop music that Large Professor alludes to is the ultimate object of my research, though my focus is on one component in particular: the beat.

I argue that beats should not considered secondary to rhymes;[5] in making beats, hip hop musicians engage in a practice that is not driven simply by the need to provide MCs with steady, regular frameworks over which they can deliver their 'bars'. Rather, beatmaking constitutes a form of composition that allows for – even requires – considerable musical imagination, aligned with other musical forms of black American origin that deal in versioning, that is, taking existing musical materials such as melodies and modifying and/or recontextualising them, and subverting the apparatus of Western music's systems, as in hard bop's radical explorations of harmony. Beatmaking, then, might be understood best as comprising an openly technologically-mediated (and chiefly electronically-mediated) collection of these historically black American practical creative impulses; it is in the *process* – more so than the *products* – of beatmaking that I find the essence of hip hop to exist in its most potent state. This thesis aims to map out how developments in hip hop music's style(s) have been driven by developments in beatmaking, with due consideration for the material conditions that have shaped them.

Chapter 1 begins by offering a more nuanced definition of beatmaking through drawing attention to hip hop's roots: the DJ-led party culture of the South Bronx in the 1970s. I assess the notion that DJing is, to a large extent, analogous to beatmaking, and that hip hop's widespread use of recorded drum breaks sees it become a postmodern recapitulation of hard funk as propagated by black American musicians like James Brown. From here, I affirm that hip hop, encompassing beatmaking, is coloured by the aesthetic devices of 'flow', 'rupture', and 'layering',[6] before employing this triad in an evaluation of the scope and significance of sampling.

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[5] I make this claim with the acknowledgement that, to a great extent, hip hop music is driven by the rhythmic interplay between beats and rhymes, so to regard them as entirely mutually exclusive components would be counterintuitive.
[6] Identified by Arthur Jafa and explored further by Tricia Rose.

In order to tackle the methodological concerns of studying hip hop music in an academic capacity, I dedicate Chapter 2 to pursuing a critique of standard musicological/analytical approaches, finding their reliance on Western music's rubrics and devices to be untenable. Drawing from phenomenology, spectralism, and *musique concrète*, I favour an approach to critical listening that regards music as 'morphology of feeling',[7] foregrounding music's capacity to reflect and communicate the intensities and progressions of human emotions.

The theoretical framework of the thesis is established in Chapter 3, as I posit that underground hip hop culture and the capitalist culture industry comprise an indivisible dialectical totality that spurs the advancement of hip hop music's history. This perspective prompts an exploration of the ways in which dialectical thought has been advocated in Western philosophy, culminating in a focus on C. L. R. James and his place in the black radical tradition. I fortify this framework, demonstrating its relevance to hip hop music, by citing concepts derived from Taoism and considering early examples of revolutionary hip hop records.

Chapter 4 discusses the practical facets of beatmaking, regarding hip hop music as a 'technoculture' that involves a range of techniques and equipment that change over time in line with evolutions in hip hop style. This aspect of my research presents me with an opportunity to elucidate one of my own original contributions to hip hop scholarship: the connection between video games and demoscene technologies/technocultures and creative beatmaking practice.

Tricia Rose, *Black Noise: Rap Music and Black Culture in Contemporary America* (Middletown, CT: Wesleyan University Press, 1994), 38.
[7] Susanne K. Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (New York: New American Library, 1948), 193.

Chapter 5 addresses the influence of place on the development of hip hop beat styles, examining the project of music geography's aims and strategies before embarking on analyses of discrete region-specific styles from across the history of hip hop music with a particular focus on hip hop scenes found in New York, Houston, and New Orleans.

To close, Chapter 6 examines the current state of hip hop beatmaking practice using an ethnographic approach, informed by the information I received during interviews with various underground beatmakers. Here, I discover the importance of online platforms and the workings of the beat tape format, before giving a commentary on my beat tape release *Hexagrammar*. Ultimately, this collection of my beats, produced over the course of my research project, functions as a 'conclusion' to this thesis in how it constitutes a final statement of my position that hip hop music is a complex technoculture which continually resists the rigidity of formal definition.

Chapter 1 – Beat

Whereas, break-beats have been the
missing link connecting the diasporic
community to its drum-woven past.
Whereas, the quantized drum has
allowed the whirling mathematicians
to calculate the ever-changing distance
between rock and stardom.
Whereas, the velocity of spinning vinyl,
cross-faded, spun backwards, and re-released
at the same given moment of recorded history,
yet, at a different moment in time's continuum,
has allowed history to catch up with the present.
We do hereby declare reality unkempt
by the changing standards of dialogue.[1]

DJing

Undoubtedly, the most important individual agent in the nascent stage of what we now
know as hip hop music was the DJ. Acting as both a figurehead and a master musician
presiding over the ad hoc dance parties of the South Bronx in the 1970s, the DJ is
impossible to overlook. The history of hip hop's initial emergence and the contributions
of its trailblazing DJs has been expounded thoroughly elsewhere in accounts such as *Yes,
Yes, Y'all* and Jeff Chang's *Can't Stop Won't Stop*;[2] here, I will draw from this history to
demonstrate how the DJ has continued to loom large over hip hop music in manifold
ways.

While there are some claims that New York club DJs such as DJ Hollywood and Eddie
Cheeba should be considered forebears of hip hop DJing in terms of their technical
approaches, albeit working in a commercial capacity rather than in an underground scene

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[1] Saul Williams, *The Dead Emcee Scrolls: The Lost Teachings of Hip-Hop* (New York, NY: Pocket Books, 2006),
101.
[2] Jim Fricke, Charlie Ahearn, and Nelson George, *Yes, Yes, Y'all: The Experience Music Project Oral History of Hip
Hop's First Decade* (Boston, MA: Da Capo Press, 2002).
Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation* (London: Ebury Press, 2007).

like the South Bronx in the 1970s,[3] it is broadly agreed that the 'original' hip hop DJ was Kool Herc, a Jamaican national who moved to New York City in 1967 when he was twelve years old.[4] Aside from the radical idea of playing only the drum break sections of records in live DJ sets, a practice that I will examine later, Herc's principal innovation as I see it was his staging of parties in locations including but not limited to parks, school yards, and community centres. With the South Bronx being a corner of New York City that suffered extreme urban blight throughout the 1970s, Herc's enterprise was received by the area's youth with appreciative curiosity. Another early hip hop DJ, Kool DJ AJ, reflects:

> See, in the South Bronx we really had nothing to do. There wasn't no movie theaters – everything we did was like something to make a little bit of excitement in the area. Shooting cans with a water pump was exciting in the area, you know what I'm saying? And then when people seen Kool DJ Herc, it was like some excitement, and it drew a crowd. I just took notice, and it was interesting.[5]

Here, it becomes evident that the foregrounding of place in the broader experience of hip hop culture is something that was affirmed from the outset. John Mowitt, citing the example of Bo Diddley's early musical activities, suggests that this link between grassroots music and the urban experience was also an early driver of rock and roll's development from blues, as black youth became street musicians to 'beat back' against the oppressive conditions they lived in.[6] The furtive nature of this enterprise, using portable equipment and capitalising on fleeting windows of time before the authorities arrived to shut them down, helped such musicians to articulate their lived experiences in a direct manner. Herc's audacious use of space paralleled his crafty use of repurposed technologies; Russell A. Potter notes:

> Hip-hop, armed with electricity (back in the day, pirated from a city light pole), cheap turntables, makeshift amps, and used records, was bricolage with a vengeance, and the fact that this bricolage has in its turn been commodified does not interrupt but in a critical sense *fuels* its own appropriative resistance, rendering it both more urgent and more richly supplied with 'recyclables'.[7]

Early hip hop's (un)canny strategy of bricolage is theorised by Potter as belonging to the black American vernacular culture's tradition of 'signifyin(g)', which is to do with the

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[3] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 81.
[4] Ibid., 25.
[5] Ibid., 35.
[6] John Mowitt, *Percussion: Drumming, Beating, Striking* (Durham, NC: Duke University Press, 2002), 133.
[7] Russell A. Potter, *Spectacular Vernaculars: Hip-Hop and the Politics of Postmodernism* (Albany, NY: State University of New York Press, 1995), 100.

exploding of language to undermine the authority of the dominant culture through: 'the trope of pastiche and a pastiche of tropes […] the sly exchange of the literal for the figurative'.[8] Potter demonstrates how hip hop is rooted in this tradition by cunningly practicing signifyin(g) himself, highlighting the turntable as a device that can: ''turn the tables' on previous black traditions, making a future out of fragments from the archive of the past, turning consumption into production'.[9] With this in mind, the turntable can be regarded as the single elemental piece of music technology in the story of hip hop music's evolution, to the extent that all other pieces of music technology that have been used in hip hop, from drum machines, to samplers, to music production software, become surrogates for the turntable; the practical concerns of use differ, but the prevailing spirit of carving out a musical future with the sharpened materials of the past remains the same.

Kool Herc's fascination with music that led him to start his parties in the South Bronx was ignited by the hard funk music of James Brown, but also by the Jamaican sound system culture that he was exposed to as a child:

> James Brown came to the island one time. "I Feel Good" at the time was a hit record, and I fell in love with that record. Also Jamaican music was a big influence on me, because there was a lot of big sound systems they used to hook up and play on weekends. I was a child, ya know, seein' all these things going on, and sneakin' out my house and seein' the big systems rattling the zincs on the housetops and stuff.[10]

These two disparate musical realms – one American, the other Jamaican – were united by Herc in his playing of hard funk breaks through a powerful sound system reminiscent of those he encountered in his native country,[11] resulting in a compelling strategy made up of a technological base and a musical superstructure. This system, however, was limited in terms of what it could offer the 'B-boys' and 'B-girls' who danced to the isolated breaks; when a break as played by Herc ended, the flow of the music would be

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[8] Potter, *Spectacular Vernaculars*, 18.
[9] Ibid.
[10] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 25.
[11] Kool Herc's first party took place in a Bronx rec room, playing records containing hard funk breaks as this is what the crowd responded best to; his previous attempts to move the crowd using his Jamaican dancehall records were not nearly as successful.
Chang, *Can't Stop Won't Stop*, 70.

disturbed in a manner that frustrated some members of his crowds as it was not conducive to continued dancing.[12] As such, Herc's model was expanded and embellished upon several times by a number of DJs, most notably Grandmaster Flash. Flash synthesised his own style of party DJing by adopting Herc's model of playing propulsive hard funk breaks and extending them in a fluid fashion by blending seamlessly from the end of a break back into the start using two copies of the same record, an idea he borrowed from the disco DJ Pete Jones.[13] This evolution of DJing practice in early hip hop is relevant to my research into the subsequent evolution of hip hop beat styles and beatmaking practices because it illuminates the pragmatic nexus of modern vernacular music that comprises technological and musical innovations abstracted from the use of existing technology in resourceful new ways and creative ideas prevalent in other musical scenes.

Fig. 1.1 – Grandmaster Flash in *Wild Style*

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[12] Chang, *Can't Stop Won't Stop*, 112.
[13] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 58.

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If there is one critical disjunction between the practices of early hip hop DJing and beatmaking, it is to do with the nature of their intended products – the former's being a transient live experience in the form of a party, and the latter's being a record that can be put away in a collection and revisited whenever the owner pleases. With hip hop's transition from an entirely 'live' musical culture into a genre of recorded popular music acknowledged, we should address the impact of DJ-led hip hop's live-ness and the part it has played in sustaining the culture's popularity. DJ Ready Red of the Houston group Geto Boys, states:

> I'm a DJ first of all. You know what my thing is? I keep two records on time for my MCs. I can do the live show. How I even got into beatmaking was because there was a record called *Flash Is On The Beatbox*, and that's my number one idolized, groupie worship hero, you know what I'm sayin'?[14]

Though hip hop had laid down new foundations in cities hundreds of miles from the South Bronx in the 1980s and 1990s, Flash retained his status as the idealised, authentic hip hop DJ to the likes of Ready Red, who originally came from New Jersey but took the East Coast's break-oriented musical sensibility with him to the South.[15] Wherever hip hop appeared in the United States, it would invariably begin as it did in the South Bronx, that is, as a strictly live affair, as Memphis-based DJ Spanish Fly remembers:

> We weren't recording then, recording wasn't big back then, not at all. It was right there at the party. That was the thing – fuck an album, fuck a mixtape, fuck all that shit. We needed to rock in front of some motherfuckers. Whether on the corner or at a party. We used to set up and just do the shit […] We just wanted to make a party. Fuck the money, it wasn't about no motherfucking money then.[16]

Spanish Fly is keen to assert that the earliest stage of Memphis hip hop was, at least to him, a decidedly uncommercial affair, existing only as an alternative, street-level means of leisure. The idea that hip hop is practiced primarily – or even entirely – for pleasure's sake and the manner in which cities across the United States embraced it before developing their own region-specific styles is a pivotal theme in the culture's history.

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[14] Lance Scott Walker, *Houston Rap Tapes* (Los Angeles, CA: Sinecure Books, 2013), 41.
[15] Ibid., 40.
[16] Noz, 'Hip Hop Pit Stop: The Slow And Low Sound Of Memphis's DJ Spanish Fly', *Red Bull Music Academy Daily*, 2012, https://daily.redbullmusicacademy.com/2012/07/noz-pit-stop-memphis-spanish-fly (10th March, 2017).

With knowledge of Kool Herc's connection to Jamaican vernacular music and the transformation of the turntable into a creative musical device, it is possible to find philosophical substance in the vinyl record for its two (often contrasting) sides. Jeff Chang cites the reggae historian Steve Barrow for his observation that dub music constituted the 'other side', or the 'B-side' of Jamaican culture.[17] Where the 'A-side' was Jamaica's visibly violent political domain, the B-side was the music that Jamaica is celebrated for – the vernacular-driven, imagined alternative. This dialectical idea of the creative energies of a disenfranchised population resisting the worst traits of top-down power structures is similarly present in grassroots black American music. Mowitt notes:

> Not only are the bodies of black migrants beat in the city, but the beating of the body that embodies metropolitan shock is – in fantasy and elsewhere – represented as a fact of blackness, because beating is where the skin comes to be.[18]

The beating of drums that was blasted down the South Bronx's streets by way of DJs such as Kool Herc and Grandmaster Flash playing breaks was a response – a 'B-side' – to the 'A-side' of ghettoisation. From the onset of the 1980s, the DJ's status as the central agent in hip hop music waned considerably as commerce crept into the culture, but more exemplars of the A-side/B-side dynamic materialised, and the music's new main instigator, the producer, was in many ways simply an evolved form of the DJ.

As hip hop was formalised and fashioned into a genre of popular music in the 1980s, the DJ's was no longer the name that would top live bills; this distinction went to MCs, whose recording careers were made possible on a technical level by the producer, as Chang explains: 'Early rap labels had already marginalized the DJ, and the new technology effectively mimicked and extended the DJ's musical capabilities'.[19] Consequently, MCs advanced their lyrical styles and flows from simple party-based rhymes to what Joseph G. Schloss sees as a 'denser, more complex and poetic style', keeping up with the diversification of techniques and source materials that producers brought to the music.[20] However, the distinction between DJs and producers is not nearly as pronounced as this

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[17] Chang, *Can't Stop Won't Stop*, 35.
[18] Mowitt, *Percussion*, 162.
[19] Chang, *Can't Stop Won't Stop*, 229.
[20] Joseph G. Schloss, *Making Beats: The Art of Sample-Based Hip-Hop* (Middletown, CT: Wesleyan University Press, 2012), 2.

narrative might appear initially. André Sirois notes that among the more important contributions the hip hop DJ has made in modern music is: 'the manipulation and re-coding of recorded sound technology […] that undermines the read-only ideology of sound reproduction encoded into vinyl records and turntables'.[21] This conversion of 'read-only' technology into tools for the creation of new music as initiated by early hip hop DJs is also the main premise of beatmaking. The connection between the disciplines of DJing and producing is made clear by a DJing technique called 'The Funk' that was purportedly invented by Steve Dee in the late 1980s, where individual drum hits are cut from a record's break and played on the fly in 'essentially a live composition', according to Sirois.[22] This technique resembles producer Marley Marl's isolation of hard funk drum hits to be loaded into and played on drum machines, which revolutionised East Coast hip hop beats in the early 1990s.

To many sample-based hip hop beatmakers of a purist persuasion, the distinction between DJing and beatmaking does not, or at least should not, exist at all, as Schloss finds:

> Producers see Deejaying as an essential element of hip-hop production, to the extent that elements of the practice are often read as symbols of an individual's commitment to hip-hop history and communal identity.[23]

The benefit of this 'commitment' is that the DJ-as-beatmaker/beatmaker-as-DJ garners a set of special skills through a form of critical practice. Lord Finesse of the Diggin' in the Crates (D.I.T.C.) collective explains that a 'real DJ' is able to get an idea of what a record contains quickly by simply looking at the ridges in the vinyl, identifying where the track's break section is, and Finesse's D.I.T.C. collaborator Amed likens the practice of sample-based beatmaking to DJing for it being to do with knowing which sounds blend well together.[24] The latter concern has an additional, metaphysical dimension to it: in his ethnographic study of club nights at the Red Dog in Chicago, Ed Pavlic contends:

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[21] André Sirois, *Hip Hop DJs and the Evolution of Technology: Cultural Exchange, Innovation, and Democratization* (New York, NY: Peter Lang Publishing, 2016), 2.
[22] Ibid., 87.
[23] Schloss, *Making Beats*, 25.
[24] *Deep Crates*, by Jerry Weisfeld, 2004, 70 min. (DVD, Beatdawg Films).

for DJs, new juxtapositions of tone and timbre jar meaning loose from dead syntax, draw new metonymic patterns out of the depth of the dancers' experience. In the vortex of the imagined, the lived, and the performed, the experienced and the perceived, the seen and the heard, distinctions blur, identities are cast aside, and people emerge into the public flux.[25]

While Pavlic's study is not to do with hip hop music per se, this point is helpful for its reminder of the importance of the crowds DJs play to, as they must be moved in order for a performance to be deemed successful, and to move them is to signify playfully on the history of recorded popular musics by establishing dialogues between sounds of disparate genres and eras through the use of a mixer's cross-fader: 'At this convergence dancers can literally have one step in 1995 and one in 1975'.[26] This vertical layering of sounds in dialogue through playing simultaneously is compatible with hip hop's aesthetics for the uneasy, combative sonic atmospheres that can result, as Grandmaster Flash describes:

> That's what mixing two songs together felt like. A question and an answer. One song would ask, the next one would respond. It wasn't just a battle between two b-boys, it was a battle between songs as well.[27]

The challenge to move people by signifyin(g) on sounds is also a priority in beatmaking, as producers seek to affirm their authenticity by aligning themselves with the culture's DJ-oriented roots. Another connection that beatmaking has with DJing can be found in the use of effects such as filtering; the producer Large Professor reflects on how Pete Rock showed him how to expand the possibilities of what can be sampled for the purpose of making a beat by using a low pass filter to separate a track's bass line from the rest of the instrumentation:

> [I]t was crazy, because now you could just get the bass out of a record. I mean, but that's Jamaican. That's the roots. You going to the dub. They just take all the highs out or take all the bottom out.[28]

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[25] Ed Pavlic, 'Rap, Soul, and the Vortex at 33.3 RPM: Hip-Hop's Implements and African American Modernisms', *Callaloo*, 29/3 (Summer, 2006), 956-968 (961).
[26] Ibid., 965.
[27] Grandmaster Flash and David Ritz, *The Adventures of Grandmaster Flash* (New York, NY: Broadway Books, 2008), 80.
[28] Ali Shaheed Muhammad and Frannie Kelley, 'Large Professor, Part 2: 'I Really Live Through This Music'', *Microphone Check : NPR*, 2015, https://www.npr.org/sections/microphonecheck/2015/08/20/431252442/large-professor-part-2-i-really-live-through-this-music (14th June, 2017).

Through using such an effect to affect the musical profile of a beat, hip hop producers recall the use of the collected tools of a recording studio as a musical instrument as devised in Jamaican dub music, thus completing a circuit in hip hop history by returning to the Jamaican technical influence that prompted Kool Herc's first forays into DJing.

I am confident that the connection between DJing and beatmaking remains relevant in the 21st century to a significant degree, in spite of Schloss, writing in an afterword to the 2012 edition of his text *Making Beats: The Art of Sample-Based Hip-Hop*, claiming that the evolution of hip hop has been so long and complex that: 'the connection between deejaying and hip-hop production is no longer as intimate as it once was', and that DJing practice in isolation from beatmaking has been changed forever by the Internet and the prevalence of digital audio files.[29] The workflow types of making hip hop music have indeed advanced, but some expectations, like the demand of a beatmaker to listen widely and imaginatively to a great wealth of sources in order to instigate exciting, original beats, persist.

Another activity that links DJing with beatmaking within the practical framework of hip hop culture is crate-digging, a term that Lord Finesse claims was popularised by the name of his crew – Diggin' in the Crates.[30] Crate-digging involves searching in record shops, record fairs, and thrift stores for records that can be used in DJing and sample-based beatmaking, especially rare records and records that contain 'open' breaks and sounds. With that said, crate diggers are not always necessarily discerning in the records they select from the outset; Jesse West explains:

> The whole art of diggin' in the crates for me was the anticipation when you go somewhere and you buy a stack of records or maybe somebody gives you a crate of records – the anticipation of going home and listening to those records not really knowing what's on them, just going home and listening to them and then finding sounds and parts that you wanna sample – that's all part of the rush.[31]

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[29] Schloss, *Making Beats*, 204-205.
[30] *Deep Crates*, Weisfeld.
[31] *Deep Crates 2*, by Jerry Weisfeld, 2007, 64 min. (DVD, Beatdawg Films).

What is telling here is West's use of the word 'art', suggesting that there is a craft to be learned in the process of acquiring records. Of early hip hop's most prominent DJs, Afrika Bambaataa is acknowledged as being the most records-focused for the breadth of genres he would play and the obscurity of his records, and thus can be thought of as hip hop's first bona fide crate digger. Bambaataa reflects:

> I had a broad taste in sound, and I was checkin' all into the rock section or the soul sections or the different African sections or the sections of the Latin records. Back then you didn't have the stores where you can listen to records or turntables where you could put the record on, so the cover had to grab me.[32]

The kind of stab-in-the-dark selection based only on observing record sleeves that is described here remains a key tactic for modern crate diggers like J.Rocc, who states that he often picks out records for their striking covers and then proceeds to read the back panel to check for details like the record company and year of release.[33] By practicing crate-digging, DJs and beatmakers can nurture a unique, personal sonic signature that impresses upon hip hop aficionados and would-be imitators (or 'biters') alike.

Remembering his time spent shopping for records after he had established himself as a major player in the South Bronx's fledgling hip hop scene, Bambaataa claims: 'I was looking for beats all over the place. I even had people who used to follow me in the stores, because a lot of times we had spies from other DJ groups'.[34] Bambaataa's reputation a sort of patron saint of crate diggers is sustained by seasoned beatmakers like those of the D.I.T.C. crew; Diamond D states that he grew up listening to tapes containing recordings of DJ sets by Bambaataa's Zulu Nation group for the obscure sounds they offered alongside the usual B-boy-friendly fare, and Buckwild describes how some DJs who also make beats still keep their favourite records secret so that they remain a part of their individual sound: 'the same thing happens with samples because it's like you want to keep the sound of what you're doing – you keep it within your cipher [meaning 'group', in this instance]. Information's vital'.[35] Regardless of one's priorities as

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[32] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 46.
[33] *Secondhand Sureshots*, by Mark "frosty" McNeill and Bryan "Morpho" Younce, 2010, 30 min. (DVD, Stones Throw).
[34] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 46.
[35] *Deep Crates*, Weisfeld.

a DJ and/or beatmaker, it is abundantly clear that hunting for sonic sources, whether it
be by way of sifting through trash or holding out for treasure, has been of paramount
importance in hip hop music, particularly in the 1970s to the early 1990s.

The practice of crate-digging has also been championed for its educational potential.
Potter notes:

> In many cases, DJ raids upon the music of previous generations reach back well before their
> own birthdates, such that their own search for sounds becomes a kind of genealogical
> *re*search; as a fringe benefit, many older listeners may be drawn to a rap by the familiarity of
> the sampled material.[36]

Hence, black American music, a milieu of music with a history of having its most vibrant
examples being co-opted commercially and then disposed of by the dominant culture,
strikes back through the reanimation of crate-digging, going a small but significant way
towards exposing the bitter truths of America's racial issues.[37] Expanding on the theme of
music education in crate-digging, Sirois compares the acquisition of vinyl records to
downloading audio files from the Internet, stating that many DJs insist on the latter being
inferior:

> Diggin' for records – actually flipping through, touching, and seeing all the information on a
> vinyl record – also provides DJs with information that may not be available online [...] This
> information, then, allows DJs to seek out other music that a producer worked on or a
> drummer played on; vinyl records represent starting points for further musical exploration.[38]

To elaborate on this insistence on vinyl, Sirois identifies an element of 'emotional
investment' in crate-digging for vinyl that is absent in looking for digital sounds: 'MP3s do
not lead as easily to such bonds [between DJs and vinyl records] because they are
disposable and there is little commitment to obtain/maintain them'.[39] This poses
questions for contemporary hip hop, as modern beatmakers often take from digital files
rather than records – does this compromise the hip hop-ness of their work? Is the rift
between analogue and digital media as severe as Sirois suggests? These questions will be
tackled as this thesis examines the current state of underground beatmaking practice.

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[36] Potter, *Spectacular Vernaculars*, 117.
[37] Ibid., 118.
[38] Sirois, *Hip Hop DJs and the Evolution of Technology*, 17.
[39] Ibid., 146.

Breaks

As I have established, the main type of musical material that was acquired from vinyl records to serve as the sonic backdrop for early hip hop's parties was the break. Flash recalls:

> My thing was, to every great record, there's a great part. This is what we used to call "the get down part." This is before it was tagged "the break"; it was called "the get down part." And this particular part of the record… unjustifiably, was maybe five seconds or less. This kind of pissed me off. I was like, "Damn, why'd they do that?" You know? So in my mind, in the early seventies, I was picturing, "Wow, it would really be nice if that passage of music could be extended to like five minutes."[40]

The break was thus transfigured from a fleeting outburst of rhythmic energy into an incessant, propulsive groove. The phrase 'get down', used by Flash in the above quote, recalls the hollers of hard funk band leaders, especially James Brown, highlighting in early hip hop an entrenched funkiness that Kyra Gaunt regards as a crucial link in the genealogy of black American music. Gaunt focuses on the presence of a live-ness in studio-produced hard funk recordings of Brown and George Clinton, where these musicians would attempt to emulate the musical energy of performers communicating with an audience without a real audience being present.[41] The live-ness of funk, where 'live' can mean both 'excellent' and 'exciting' in the black American lexicon in addition to referring to music that is made and consumed in the same place and in the same moment, fed into the sound of the early hip hop music that was derived from funk records, and set it apart from popular music produced by the corporate music industry, which, Gaunt states: 'has often been diametrically opposed to the *aesthetics* of black musical sound and expression (i.e., hollers, noisy crowds, call-and-response between the performer on stage and the performers in the audience)'.[42] Furthermore, Gaunt notes that Brown would experiment with new musical ideas during concerts and then record them in a studio very soon after, sometimes adding recorded audience noise to inject a 'live' feeling into the track;[43] I would suggest that a comparable live-ness is performed in

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[40] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 58.

[41] Kyra D. Gaunt, 'The Veneration of James Brown and George Clinton in Hip-hop Music: Is it Live! Or is it Re-memory?' in Straw, Will, Johnson, Stacey, Sullivan, Rebecca & Friedlander, Paul, (eds.) *Popular Music: Style and Identity* (Montreal: The Centre for Research on Canadian Cultural Industries and Institutions, 1995), 117-122 (118).

[42] Ibid.

[43] Ibid.

recorded hip hop in the form of ad lib backing vocal and brash sound effects. While recorded music cannot be entirely, truly live, it does appear to be possible to conjure live-ness in a way that bolsters the perceived authenticity of a hip hop track by way of an adherence to black American aesthetic traditions, with Brown as a 'venerated' forefather.[44] This is put into sharp relief by the 1985 Quick Quintin & M.C. Mello J. single 'The Classy M.C.'s', which contains several cuts of Brown's vocal tics and the break from 'Funky Drummer' that are inserted loosely by Quintin through scratches performed on a turntable in a manner that resembles a live performance.[45]

Up to this point I have shown how hip hop and funk are connected in terms of their harnessing of live-ness and how this justifies the ubiquity of the break in early hip hop – from here I will address the musical faculties of the break itself. Public Enemy's MC Chuck D claims that the musical energy of funk is more pertinent to hip hop than that of jazz because of its insistence on a steady beat, and this distinguishes hip hop music from the more jazz-oriented spoken word works of artists like Gil Scott-Heron.[46] While Chuck D's implicit suggestion that the continuum of jazz music is bereft of 'danceable' rhythmic figures is somewhat questionable – particularly when one regards styles that preceded bebop – his assertion that it was the musical sensibilities of James Brown that directed early hip hop is verifiable in the way DJs like Grandmaster Flash made extensive use of drum breaks.[47]

The essential structures of the drum patterns that underpin modern black American popular music are, more often than not, reducible to the basic idea of the backbeat, which comprises alternating kick and snare hits. Mowitt, detailing the backbeat as it is deployed in rock and roll, hears a kind of antiphony in this pattern that is reminiscent of the main thrust of African-derived music:

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[44] Gaunt, 'The Veneration of James Brown and George Clinton in Hip-hop Music', 117.
[45] Quick Quintin & M.C. Mello J., 'The Classy M.C.'s' (Barnes Records, 1985).
[46] Mark Dery, 'Public Enemy: Confrontation' in Forman, Murray and Neal, Mark Anthony, (eds.), *That's the Joint! The Hip-Hop Studies Reader* (New York, NY: Routledge, 2004), 407-420 (412).
[47] Ibid.

the notion of the snare "answering" the bass drum derives not simply from the generally catachrestic character of the instrument, but, more important, from the African tradition of "call-and-response" drumming patterns.[48]

This notion, permeating popular music from the middle of the 20th century onwards, is crucial to understanding the workings of the break in hip hop, which inherits its foundation of antiphony from the broader West African/black American musical continuum through the isolation and repetition of hard funk's most rhythm-focused sections and the technological replication of hard funk-like patterns using deconstructed breaks played on drum machines and samplers. Compounding the underlying concept of antiphony in the generic makeup of the hip hop break is a strong emphasis on the first beat of a four-beat bar; this phenomenon, which lent considerable gravity to the looping drum beats of early and 'golden age' hip hop, was transplanted from the hard funk records that are the original sources of breaks, and was a musical innovation of James Brown, as Rickey Vincent argues:

> By turning rhythmic structure on its head, emphasizing the downbeat – the "one" in a four-beat bar – the Godfather [Brown] kick-started a new pop trend and made a rhythmic connection with Africa at the same time. James Brown songs hit their accents […] "On the One," yet drove the furious bluesy fatback drumbeats all around the twos and fours to fill up the rhythms, never leaving any blank space.[49]

Brown's strategy of having his band playing 'on the one' constituted a subtle, yet radical overhauling of soul music's established formula by taking the emphasis away from the offbeats of '2' and '4', causing the foregrounding of rhythm to become funk's most salient feature as it stressed the beginnings/ends of regular cycles in a manner comparable to the impetus of West African music as opposed to the more linear, melody-driven priorities of European-derived musics. Furthermore, as Vincent ventures, both the perceptible musical result (of inciting enthusiastic dancing in the presence of other people) and the oblique literal associations of 'on the one' see it represent black American music's profoundly social, communal character: 'When George Clinton is heard chanting onstage "On the one, everybody on the one," he is savouring the rhythmic lock that has brought the entire house together as one'.[50] 'On the one' is easy to register in

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[48] Mowitt, *Percussion*, 26.
[49] Rickey Vincent, *Funk: The Music, The People, and The Rhythm of The One* (New York, NY: St. Martin's Press, 1996), 8.
[50] Ibid., 37.

break-based hip hop music if one considers the trope of the cipher, comprising an all-encompassing circle that is potentially inclusive of everyone in the presence of the music and 'signifies on' the shape's single continuous line to reflect infinitude – the smooth, unremitting flow of a repeated break as sustained using a round, rotating artefact. While breaks can contain an abundance of embellishments played on hi-hats and cymbals, the primacy of kick-versus-snare remains, for it offers the simplest possible beat involving more than one drum voice, setting up a groove: 'within which the dancing body can reliably find its footing'.[51] Mowitt notes that while this groove is technically a syncopation, its ubiquity in popular music has normalised it in such a way that we do not hear it as syncopated – rather, it feels natural.[52] To 'signify on' the word 'groove', the kinetic phantom of the backbeat is locked into the vinyl record's spiral cuts, which the DJ/beatmaker releases.[53]

A popular break that sounds as though it has already been reduced to a heavily stressed kick on '1', another stressed kick on '3', and antiphonal snares on '2' and '4' is the introductory drum figure of Billy Squier's track 'The Big Beat'.[54] This simple, but undeniably 'big' beat has demonstrated considerable longevity in hip hop music, as it can be heard working as a vehicle for the MCs of the Cold Crush Brothers at a critical point in their famed battle with rival crew Fantastic Romantic 5 at the Harlem World club in 1981,[55] and also as the sole element of the beat on British MC Dizzee Rascal's 2003 hit 'Fix Up, Look Sharp'.[56] Building on the foundation of the alternating kick and snare, Rowan Oliver finds that as a way of developing this groove without compromising its power-in-simplicity, funk drummers like the ones heard on hard funk breaks – James

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[51] Mowitt, *Percussion*, 30.

[52] Ibid., 32.

[53] This point resonates with Pierre Schaeffer's 'closed groove' experiment, which I will address as I examine the prevalence of looping in hip hop music.
Michel Chion, *Guide to Sound Objects*, trans. by John Dack and Caroline North (Leicester: EARS De Montfort University, 2009), 13.

[54] Billy Squier, 'The Big Beat', *The Tale of the Tape* (Capitol Records, 1980).

[55] Cold Crush Brothers, 'And It's Us, Charlie Chase Never Leaving The Base Alone – Tony Tone Never Leaving The Girls Alone, Hey Y'all', *Cold Crush Brothers Vs. Fantastic Romantic 5 Live MC Battles From Harlem World 1981* (Slammin' Records, 1998).

[56] Dizzee Rascal, 'Fix Up, Look Sharp', *Boy In Da Corner* (XL Recordings, Dirtee Stank Recordings, Platinum Projects, 2003).

Brown's onetime sideman Clyde Stubblefield being among the best remembered – often displace accents to offer rhythmic variations.[57] This approach has been adopted by hip hop beatmakers, who can demonstrate their skill and musicality by shifting programmed drum hits away from where they sat in previous bars in a way that constitutes an electronically-mediated from of grooving.

On a philosophical level, the outcry against oppressive urban environments and racist violence that hip hop and rock and roll (and blues before it) have had in common at their respective nascent stages, performed by channelling the force of the backbeat and its manifold derivatives, can be understood as formative in the rhythmic drives of these musics; Mowitt ventures:

> They are not simply musics about the urban experience. They are the "beating back" that arises as black bodies are cast off against white bodies as pelted pelts […] These "blows" are ways into particular dimensions of the subjection of human agency that are not readily available elsewhere. As such, they define the substance as a modest, but tenacious pedagogy of the oppressed.[58]

While I feel that it is necessary at this point to assert that black American music is so rich *despite* hardship and oppression, not *because of* it, so that we do not risk romanticising something as ghastly as racism, it is reasonable enough to venture that rhythm-oriented music has served as a potent voice for hope, aiding young black Americans in the struggle against the harms instigated by the dominant culture's most poisonous elements. The fact that a music such as hip hop draws most of its power from the dimension of rhythm cannot be overstated.

To further affirm rhythm's centrality to black American music, we can compare it to the elevated status that melody and harmony assume in the musics of European origin that are held in the highest regard by the dominant culture. Amiri Baraka argues:

> The most apparent survivals of African music in Afro-American music are its rhythms: not only the seeming emphasis in the African music on rhythmic, rather than melodic or harmonic, qualities, but also the use of polyphonic, or contrapuntal, rhythmic effects.

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[57] Rowan Oliver, *Rebecoming Analogue: Groove, Breakbeats and Sampling* (PhD thesis, University of Hull, 2015), 35.

[58] Mowitt, *Percussion,* 162.

> Because of this seeming neglect of harmony and melody, Westerners thought the music "primitive." It did not occur to them that Africans might have looked askance at a music as vapid rhythmically as the West's.[59]

This dismissal of musics that belong to the lineage of West African/black American musical cultures as 'primitive' embodies a particularly unsavoury colonialist outlook that attempts to justify itself by regarding the focus on rhythm as inherently deficient. Through its clinical yet freewheeling sonic bombast, hip hop music artfully and emphatically rejects this justification. Moreover, as a sort of riposte, beatmakers have claimed that in the realm of hip hop music, the overuse of melodic devices can compromise the power of a track; Marley Marl claims: 'Once you try to cloud up the music with more melody, it makes it more melodic, and you're taking away from the foundation. Believe me, the whole foundation of hip hop is the beat!'[60] Turning to academic music analysis, Adam Krims critiques analyses of popular music that focus on 'pitched parameters' above all else:

> The lesson to be learned […] is the importance of delineating carefully what one considers the parameters relevant for consideration – a decision that will often be highly context-specific by genre – and of specifying (and supporting with evidence from the relevant parties) the *culturally salient* reason for doing so.[61]

Here is a plea for scholars to properly ascertain a musical culture's priorities and concentrate on them, bearing in mind that the devices of European 'common practice' music, such as standardised notation, may not be appropriate in the study of hip hop.

While beatmaking has developed in multitudinous ways, incorporating numerous musical ideas that may involve melody, the most salient components of a beat can – and producers like Marley Marl would insist *should* – be thought of as surrogates for the break, should a break (featured in its entirety) be absent, simultaneously operating as a foregrounded pulse and as a potent incarnation of funk's infectiously danceable nature.

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[59] Amiri Baraka, *Blues People* (Edinburgh: Payback Press, 1995), 25.

[60] Amir Said, *The BeatTips Manual: Beatmaking, the Hip Hop/Rap Music Tradition, and the Common Composer* (Brooklyn, NY: Superchamp Books, 2009), 338.

[61] Adam Krims, *Rap Music and the Poetics of Identity* (Cambridge: Cambridge University Press, 2000), 19.

Looping

The cyclical rotation of the DJ's turntable is a useful metaphor for the way in which hip hop's rhythms are established by looping, setting up steady musical flows. Mowitt cites and builds on Curt Sachs's observation that the English word 'rhythm' has precedents in both Greek (*rhuthmos*) and Latin (*rhythmus*), meaning 'river' or 'flow' and 'blockage' or 'dam' respectively:

> If we begin by characterizing rhythm – which the human subject may well perceive as palpability itself – as all the elements that bear on the duration of sounds, we can not only grasp how it combines he antithetical sense of flow and blockage (a duration is an interval in that it starts, continues, and stops); we can also appreciate how intimately time and measure converge.[62]

This concept, of rhythm comprising a synthesis of 'flow' and 'blockage', is something that has been identified in the realm of hip hop studies; Tricia Rose cites an idea of cinematographer Arthur Jafa which finds that hip hop culture's aesthetics are brought to life by '*flow, layering, and ruptures in line*'.[63] Addressing 'flow' and 'rupture', Rose argues: 'In hip hop, visual, physical, musical, and lyrical lines are set in motion, broken abruptly with sharp angular breaks, yet they sustain motion and energy through fluidity and flow'.[64] Rose applies this to hip hop music more directly by describing a drum loop as a flow and turntable scratches as ruptures that interrupt to accentuate certain beats, suggesting a parallel with the real, material 'profound social dislocation' that practitioners of early hip hop music reckoned with.[65] The specific kind of connection that is shared between the oppositions of flow versus rupture, rhythm versus interruption, and underclass versus dominant culture serves as a critical pivot in how I theorise about the development of hip hop music. Such oppositions, existing in the various facets of hip hop music, are reconciled dialectically as the culture around them progresses. Regarding the case of flow and rupture, Oliver finds that the looped break is 'the synthesis of continuation (the looping (verb) of the loop itself (noun)) and the breaking (the moments of fracture and disjointedness', incorporating both of these ostensibly opposing elements in equal measure to effectively multiply the musical potential of a small fragment of a

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[62] Mowitt, *Percussion*, 24-25.
[63] Tricia Rose, *Black Noise: Rap Music and Black Culture in Contemporary America* (Middletown, CT: Wesleyan University Press, 1994), 38.
[64] Ibid.
[65] Ibid., 39.

record.[66] To advance from here, I will return to physical vinyl once more so that I can assess the full extent of the loop's significance to hip hop.

As part of his formulation of *musique concrète*, an approach to electronic music composition that entails the musical manipulation of 'sound objects' which materialise when recorded sounds are divorced from their sources so that only their 'concrete' sonorous qualities as apprehended by the ear are considered salient, Pierre Schaeffer introduced the 'closed groove' experiment. Michel Chion describes this as:

> closing a recorded fragment in on itself (as is done accidentally by a scratch), thus creating a periodic phenomenon taken, either by chance or deliberately, from any sound continuum and able to be repeated indefinitely.[67]

Through this repetition, the listener, engaging in 'reduced listening', is able to become increasingly familiar with the materiality of the sound and unconcerned with what produced the sound when it was originally recorded.[68] While the sounds that hip hop DJs and beatmakers choose to isolate are, for the most part, originally recorded as musical performances, I would suggest that the practice of looping such sounds could nevertheless be considered analogous to the 'closed groove' process, albeit tempered by the musical priorities of black American culture. The questions of how beatmakers work through this in more specific practical terms and how analyses of hip hop beats should be conducted when armed with this knowledge have had substantial implications for the direction of my research.

Considering the way in which looped musical materials function in hip hop, creating a special situation where the end of a recorded phrase is brought into direct contact with its beginning artificially, Schloss states:

> On the most basic level, looping automatically recasts any musical material it touches, insofar as the end of a phrase is repeatedly juxtaposed with its beginning in a way that was not intended by the original musician. After only a few repetitions, this juxtaposition, along

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[66] Oliver, *Rebecoming Analogue*, 102.
[67] Chion, *Guide to Sound Objects*, 31.
[68] Ibid.

with the largely arbitrary musical patterns it creates, begins to take on an air of inevitability. It begins to gather a compositional weight that far exceeds its original significance.[69]

This 'air of inevitably', charged with new musical potential, is reminiscent of that which is carried by the embryonic 'sound object' of *musique concrète*, but it also functions as an electronically actualised version of the riff, an important device in musics of the West African/black American tradition.[70] The riff as it appears in hip hop can take many forms, including but not limited to breaks, sampled melodic licks, programmed drum figures, and even vocal chants; each of these evidence discrete advancements in beatmaking style, but their repetitive natures ensure that they adhere to hip hop's elemental focus on the cyclical loop. As Schloss observes, sample-based beatmakers use the loop feature on hardware samplers (a feature that was intended by the manufacturers to be used for extending the lengths of individual notes) to instigate short musical phrases that repeat automatically, proving that new musical technologies and compositional strategies in hip hop are still geared towards the mode of musical thinking instigated by the culture's earliest DJs.[71]

In the looping break, Oliver identifies a process where a rhythmic groove as it appears on an original recording is transferred to a hip hop beat and thus undergoes a subtle, but vital transformation:

> Even assuming a simple approach to sampling in which an extract is appropriated wholesale and no manipulation other than looping takes place, the drummer's groove moves from being played as a process in relation to an unsounded structure (whether it be an underlying isochronous pulse or a contextual sense of time supplied previously by another musician), to becoming structure itself when looped as a sample.[72]

In their original contexts, operating as part of a song, breaks are oriented rhythmically by structural considerations that are particular to genre-specific presuppositions and pragmatic devices – like count-ins – that might be heard on the recording, but they themselves become structures when they are looped for a hip hop beat and thereby

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[69] Schloss, *Making Beats*, 137.
[70] Ibid., 33.
[71] Ibid., 136-137.
[72] Oliver, *Rebecoming Analogue*, 25.

assume their own autonomous, internal musical logics. Excepting examples of 'instrumental' hip hop, it is on this loop-as-structure that MCs must situate themselves.

Some MCs have remarked that before they can begin writing rhymes, they need to hear a beat first. Dray of the group Das EFX explains:

> I'm just following what the beat is leading me to, like a dance, and the beat is the lead on the dance floor. I'm just following what the beat is doing, just trying to keep up – not trying to step on the beat's toes. I like to write the rhymes right to the track – if the track pauses, I pause.[73]

For such a claim to come from an MC is telling; the vocal is generally understood to be the focal point of a performance of popular music, but here is a vocalist stressing that the leading role in a hip hop track – knowing that the role of 'leading' in many types of dance involves one individual of a couple dictating the movements – belongs to what might otherwise be called the 'backing track'. Similarly, Sean Price of the groups Boot Camp Clik and Heltah Skeltah claims: 'It's down to attaching the flow to the beat […] Like Bruce Lee said, if the water is in the jug, it becomes that jug. If water is in that bowl, it becomes that bowl'.[74] This metaphor is fitting for its suggestion that the MC's rhythmic and cadential 'flows' must fit into the framework that the beat provides, for once it is recorded or programmed, the beat is more fixed than the vocalist's forthcoming performance. While recorded hip hop performances are a different product to early hip hop's live, party-based format, they share the practical arrangement of the MC's craft being geared towards fitting into a beat.[75]

The MC's concern with how their vocals fit into a beat – rather than vice-versa – has continued into modern hip hop. Danny Brown has insisted that he only writes his rhymes

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[73] Paul Edwards, *How to Rap: The Art and Science of the Hip-Hop MC* (Chicago, IL: Chicago Review Press, 2010), 168.

[74] Ibid., 64.

[75] This is apparent on bootleg tapes of recordings from early 1980s Grandmaster Flash sets, as MCs Melle Mel and Cowboy can be heard improvising flows to match the rhythmic feels of various breaks.
'DJ Grandmaster Flash & The Furious 5 at T-Connection 1981 Live by ClassicHip_Hop | Mixcloud', *Mixcloud*, 2013, https://www.mixcloud.com/ClassicHip_Hop/dj-grandmaster-flash-the-furious-5-at-t-connection-1981-live (14th December, 2018).

when he has a beat to work with, since writing is most gratifying for him when he is able to experience an emotional response to a beat:

> [There has] gotta be a feeling […] 'cause it's mad beats that I get that I love and I want to write a song to that beat, but nothing happens. But then I might get a beat that somebody might not feel that good, but it struck somewhere in my emotion, to me to feel some type of way, and then words start coming from that emotion. And then when I want to record it, I want to capture that emotion.[76]

Here, Brown suggests that it is not necessarily the quality of a beat that will convince him to write to it, but the challenge for him to match the emotional character and intensity of a beat that he registers upon hearing it. Such an attitude presents a challenge to musicology's conventional approaches to analysing hip hop music; I would suggest that it may be more appropriate to understand the musical efficacies of beats with a consideration for human emotional responses. I have pursued this concept in tandem with consideration for hip hop's innate prioritisation of rhythm, seeing it serve as the point of departure for my forthcoming analytical framework.

Sampling

Recalling the prevalence of antiphony that underpins the West African/black American musical tradition, Baraka likens African call-and-response models of group singing to the manner in which American jazz musicians improvise to develop an existing melody, producing 'answers or comments on the initial theme' that explode the core of the source material's latent musical potential.[77] Hip hop, belonging to the same lineage, performs something of a transcendental form of call-and-response in beats that are produced by sampling from existing records and through the 'flip' – an 'answer' track to the 'leader' of the original recording. Oliver argues that in sample-based beatmaking (assuming the sampled material is mined from vinyl records), a fragment of a sound goes from analogue to digital as it is recorded in the sampling device's computer memory, and then returns to analogue as it is projected into the air and thrown into a relationship with

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[76] Ali Shaheed Muhammad and Frannie Kelley, ''Putting The Pill In The Pudding': An Interview With Danny Brown', *Microphone Check : NPR,* 2014, http://www.npr.org/sections/microphonecheck/2014/01/29/265730068/putting-the-pill-in-the-pudding-an-interview-with-danny-brown (16th June, 2017).

[77] Baraka, *Blues People*, 26-27.

a recording MC; this process allows the sampling beatmaker to establish a collaboration with a musician on the original recording, albeit a virtual one due to the sampled musician's physical absence and unwitting role.[78]

By sampling existing records, beatmakers conjure the histories particular to the sampled material while aligning themselves with hip hop's culture's custom of utility under austerity; as Vanessa Chang puts it: 'the historicity of the source operates in counterpoint with the ahistorical intentions of the practice, as producers deliberately work against the aura of the original'.[79] The sampled record's 'aura' is presented in an uncanny manifestation, eroded through recontextualisation and not necessarily fully intact, as a sample-based beat establishes itself through the beatmaker's digital musical manipulation. This evidences what Justin A. Williams sees as a duality of historical planes: one of hip hop culture's 'ancestral' precedents, and the other of hip hop's 'intracultural hermeneutics',[80] that is, hip hop's own technical, musical applications – the *verb* of hip hop music as opposed to the *noun*. This is apparent in the work of DJ Shadow, an instrumental hip hop producer whose album *Endtroducing…..* may not always resemble hip hop as it commonly heard and known,[81] but, as Schloss understands it, it adheres to underground hip hop's technical approaches and the rules that make up the 'ethical practice' of sample-based beatmaking.[82] Chang goes on to cite the concept of the 'rhizome' as popularised by Gilles Deleuze and Pierre-Félix Guattari, contesting that:

> Sampling occasions the arousal of polysemy over the singular theological meaning, which does not enact of the death of the author, or the musician, or even the past, simply because it has nothing to do with death.[83]

This claim that sample-based beatmaking is rhizomatic, entailing an entanglement of disparate eras and genres, sounds reasonable enough initially, but it is at odds with hip

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[78] Rowan Oliver, 'Breakbeat Syncretism: The Drum Sample in African American Popular Music' in Metcalf, Josephine & Spaulding, Carina, (eds.), *African American Culture and Society After Rodney King: Provocations and Protests, Progression and "Post-Racialism"* (Farnham: Ashgate Publishing, 2015), 177-192 (181).
[79] Vanessa Chang, 'Records That Play: The Present Past in Sampling Practice', *Popular Music*, 28/2 (May 2009), 143-159 (145).
[80] Justin A. Williams, *Rhymin' and Stealin': Musical Borrowing in Hip-Hop* (Ann Arbor, MI: The University of Michigan Press, 2014), 20-21.
[81] DJ Shadow, *Endtroducing…..* (Mo Wax, MW059, 1996).
[82] Schloss, *Making Beats*, 132.
[83] Chang, 'Records That Play', 156.

hop culture's tendency towards honouring its roots in a fashion that does not belie chronology, i.e. the 'veneration' of James Brown and the recognition for early hip hop's South Bronx originators like the DJs Kool Herc and Grandmaster Flash that I detailed earlier. European-derived postmodern theory can only be stretched so far; attempts to reconcile it with hip hop's African-derived epistemology do not always work to reflect the culture's reality. With this in mind, Gaunt argues:

> Rather than some obvious example of the "postmodern," we might begin to understand sampling better as a continuation of black musical aesthetics that grew out of the multi-national slave culture throughout the US colonies.[84]

In the study hip hop – and black American music at large – one might do better to find the Afrocentric tropes that become apparent through observing musical practices on their own terms, with theory and philosophy of European origin present as a supplement only where appropriate.

Schloss sees the popularisation of sampling in beatmaking as a major turning point in hip hop music for its facilitation of multi-layered textures, advancing beyond the basic model of an MC rhyming over a single looping break: 'because more than one loop could be played simultaneously, producers could take their drums and music from different records'.[85] This affords the beatmaker the ability to construct complex figures made up of sounds taken from contrasting genres and eras of recorded music. In a point that is consistent with Williams's emphasis on hip hop's 'intracultural hermeneutics', Schloss argues that while many scholars have commented on how producers sample funk and soul records by black artists to align themselves with the history of black music, producers also sample from white outfits if the material can be easily channelled into a composition with a prevailing black aesthetic. In particular, the harnessing of rock music by DJs and beatmakers for purely aesthetic compositional purposes is a firmly established hip hop tradition in itself. Aside from Run-DMC's hit 'Walk This Way' featuring Aerosmith, a track that barely resembles hip hop at all for much of its duration but is nonetheless considered a watershed moment for hip hop by popular music journalists and

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[84] Gaunt, 'The Veneration of James Brown and George Clinton in Hip-hop Music', 117.
[85] Schloss, *Making Beats*, 132.

historians,[86] there have been numerous sonic quotations of rock across hip hop's several decades: in hip hop's earliest incarnation, DJs played the instrumental section of British rock band Babe Ruth's 'The Mexican' as a break;[87] in hip hop's 'golden age', Boogie Down Productions looped the main guitar riff from AC/DC's 'Back in Black' as the central, looping groove on their track 'Dope Beat';[88] and more recently, Kanye West's 'Power' sampled a short phrase from King Crimson's '21st Century Schizoid Man' for a cadential moment of rupture at the end of the track's refrain.[89] If hip hop samples from rock in order to lend a track some crashing bombast, it might sample from a jazz record in a bid to cultivate a sound of sophisticated coolness, without any sense of obligation to invoke and pay tribute to jazz's legacy. Upon noting jazz's disappearance from black American vernacular culture in the late 60s and early 70s, Perchard ventures:

> It's easy to see why hip hop producers in their early twenties and even late teens at the turn of the 1990s, those born at the moment of jazz's apparent demise, were construed as acting with acute historical consciousness: not because of their closeness to jazz source materials, but precisely because of their distance from them.[90]

If hip hop's sampling of jazz records is prolonging any kind of musical tradition, it is its own spirit of fashioning the new from the detritus of the old as opposed to championing jazz's pioneers. Perchard demonstrates this by highlighting that much sampling of jazz in 1990s hip hop was of neither avant-garde, bebop-informed jazz nor the consciously canonising revivalism of the kind propagated by Winton Marsalis, but 1970s 'smooth jazz', for its 'even-eighths' rhythmic basis that is conducive to loops playing in regular measures of four beats.[91] Perchard goes on to produce a chart that shows the number of times a jazz artist has been sampled against the number of albums they have had featured on the *Billboard* chart. The more popular 'smooth' jazz musicians on the list such as Ramsey Lewis and Roy Ayers, and 'soul jazz' artist Lou Donaldson (who tops the list) have been sampled significantly more times than the post-bop players Eric Dolphy and Charles Mingus, suggesting that hip hop's engagement with jazz is one realised

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[86] Run-DMC, 'Walk This Way' (Profile Records, 1986).
[87] Babe Ruth, 'The Mexican', *First Base* (Harvest, EMI, 1972).
[88] Boogie Down Productions, 'Dope Beat', *Criminal Minded* (B-Boy Records, 1987).
[89] Kanye West, 'Power', *My Beautiful Dark Twisted Fantasy* (Roc-A-Fella Records, 602527544618, 2010).
[90] Tom Perchard, 'Hip Hop Samples Jazz: Dynamics of Cultural Memory and Musical Tradition in the African American 1990s', *American Music*, 29/3 (Fall 2011), 277-307 (286).
[91] Ibid., 297.

chiefly out of practical, musical need.[92] Sampling from genres that are novel to popular music can also be boasted about as a way of claiming one's supremacy as a crate digger – Diamond D, for instance, claims that he was the first beatmaker to sample from a blues record.[93] Above all though, it should be clear that while hip hop sampling can potentially work as a way of invoking other black American musics (as early hip hop invoked hard funk), the practice is thought of by beatmakers principally as a creative means, a search for bold new combinations of sounds, as opposed to a self-satisfied end in itself.

Discussing sampling in beatmaking, producer El-P states: 'It's beautiful because of the actual sound, like the actual sound is unique and special. You can't find another form of music where sampling has played a bigger part'.[94] This emphasis on 'actual sound' recalls *musique concrète* as outlined earlier, but of course, sample-based hip hop's technology is markedly different to the tape machines used by Schaeffer. El-P explains that his way of 'using samples as sounds' is enabled by a keyboard-based sampler made by Ensoniq; having a direct, tactile connection between his hands and digital sounds through the familiar, intuitive, and immediately accessible interface of the standardised keyboard has allowed him to develop an idiosyncratic signature in his rhythmic programming, [95] echoing James Brown's claim that among his principal musical innovations in the 1960s was the way in which he treated each individual voice in his band – including the guitars and horns – like they were drums.[96]

As I have established, being considered a pioneer of hip hop DJing has meant being responsible for introducing a new way of using existing technology. This is also true of sample-based beatmaking, as Lord Finesse argues: 'Show[biz, a founder of D.I.T.C.] was the first one who was choppin' up loops […] where he took a lot of my loops […] and

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[92] Perchard, 'Hip Hop Samples Jazz', 298.
[93] *Deep Crates*, Weisfeld.
[94] 'Boots Talks with El-P for the Talkhouse Music Podcast', *Talkhouse*, 2015, http://www.talkhouse.com/boots-talks-with-el-p-for-the-talkhouse-music-podcast (2nd May, 2017).
[95] Ibid.
[96] James Brown and Bruce Tucker, *James Brown: The Godfather of Soul* (London: Sidgwick & Jackson, 1987), 158.

killed them shits, just chopped them shits up'.[97] The technique of chopping, involving the isolation of small pieces of recorded phrases to be played in new rhythmic and textural arrangements,[98] is demonstrated in the film *Secondhand Sureshots* featuring the beatmakers and DJs Nobody, Ras G, J.Rocc, and Daedalus who are tasked with spending $5 on five records in Californian thrift stores, then making one track each using nothing but samples (subjected to cuts and effects) from these records.[99] The producers, relishing a sort of 'thrill of the hunt', search for records containing suitable sounds. Ras G picks out *Machine Head* by Deep Purple for his belief that it would be likely to contain isolated kick and snare sounds, Nobody buys *Touch* by John Klemmer as he notes that Klemmer's records have been coveted by beatmakers for their 'open' passages of saxophone and organ.[100] Daedalus is eager to stress that he would not want to sample and chop something if it already sounds 'done', but only if he believes he can repurpose it in line with his own musical style: 'The game isn't to make it unrecognisable, the game is to make it your own'.[101] The regard for samples as autonomous, malleable sound objects, the performance of individuality in style, and the inventive extension of music technology's capabilities are hereby intertwined in the practice of sample-based beatmaking, making for a satisfying and compelling method, but one that has not been free of obstacles as it helped hip hop garner more and more mainstream attention.

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[97] *Deep Crates*, Weisfeld.

[98] As a further possible likeness between hip hop production and *musique concrète*, chopping could be considered analogous to Pierre Schaeffer's 'cut bell' technique, where parts of a sound's duration can be stripped away to produce a new sound with a different onset and/or release, altering the listener's perception of its timbre.
Chion, *Guide to Sound Objects*, 13-14.

[99] *Secondhand Sureshots*, McNeill and Younce.

[100] Ibid.

[101] Ibid.

Fig. 1.2 – Ras G in *Secondhand Sureshots*

In 1991, a landmark copyright lawsuit saw Biz Markie challenged by the Irish singer-songwriter Gilbert O'Sullivan over the use of a sample lifted from a recording of the latter's song 'Alone Again'. [102] O'Sullivan won, setting the precedent that record labels are required, by law, to 'clear' any samples that their artists wished to use with the owner(s) of the sampled material. This development had serious implications for hip hop producers whose craft hinged on the use of samples, as Wayne Marshall finds:

> Between paying the record labels, who typically own the mechanical rights to sound recordings, and the writers and/or companies who own the publishing rights – none of which, of course, necessarily goes to the samplee – most hip-hop artists with limited (if not nonexistent) budgets could never hope to afford such a pricey but prized production technique.[103]

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[102] 'Grand Upright v. Warner 780 F. Supp. 182 (S.D.N.Y. 1991)', *UCLA | School of Law*, archived 2011, https://web.archive.org/web/20111004004220/http://cip.law.ucla.edu/cases/1990-1999/Pages/granduprightwarner.aspx (14th December, 2017).
[103] Wayne Marshall, 'Giving up Hip-Hop's Firstborn: A Quest for the Real after the Death of Sampling', *Callaloo*, 29/3 (Summer, 2006), 868-892 (877).

As a result of this 'black eye on the sampling game' as Pete Rock puts it,[104] beatmakers, particularly those working with recording artists who are visibly commercial, are antagonised by what they regard as a serious creative inhibition. DJ Shadow, a producer who claims to have had to discard some of his tracks because of sample clearance problems, reflects: 'We're living in this strange dichotomy where music has technically never been worth less, and yet, where samples are concerned, people have never wanted more'.[105] In the current environment that sees hip hop as a long-established co-opted interest of the music industry, Shadow advocates for a robust, clearly defined 'fair use' system in the law regarding sampling that would allow beatmakers to exercise their abilities to make new musical figures from existing recordings without fear of being sued:

> because otherwise all of my heroes become criminalised […] from DJ Premier to Large Professor to Pete Rock to Marley Marl […] it was a different era, and I don't think you can apply the hyper-greed, hyper-capitalist kind of mentality that we're living in now to three decades ago, or for that matter two decades ago'.[106]

To subscribe to such an outlook is to find an ethical quandary: the culture industry that has appropriated hip hop music for commercial ends also vilifies an element of it that is crucial to the modern performance of black American music's resourcefulness and extended antiphony.

Schloss cites the evasion of the oftentimes costly sample clearance process as the chief reason behind other beatmaking approaches becoming more prominent than sampling in commercial hip hop at the time of *Making Beats*'s original publication in 2004,[107] but since then, contemporary hip hop's most recognisable artists enjoy so much in the way of financial backing through their past commercial successes that sample clearance is not necessarily a problem for them,[108] and many lesser-known artists are prepared to run the risk of sampling relatively obscure records without clearance, subjecting their samples to all manner of cutting and signal processing techniques in order to fit them into their

[104] *Deep Crates 2*, Weisfeld.
[105] 'DJ Shadow and Clams Casino', *Talkhouse*, 2016, http://www.talkhouse.com/artist/dj-shadow-clams-casino (3rd May, 2017).
[106] Ibid.
[107] Schloss, *Making Beats*, 6.
[108] Marshall, 'Giving up Hip-Hop's Firstborn', 869.

compositions. Even Pete Rock, a well-known beatmaker, claims that he samples from movie soundtrack LPs, though he is careful to go for more obscure titles so that he does not find himself 'asking for trouble'.[109] Marshall sees a spirit of defiance in this continued, covert use of sampling, positing that: 'Arguing with words and beats that their manipulation of other musicians' performances renders them new and makes them their own, such producers assail copyright as fundamentally unfair'.[110] Although sampling persists in contemporary beatmaking, it is now far more likely to exist alongside other, equally prominent techniques, or as part of a synthesis with other techniques, rather than being the only production method used.

In the aftermath of the Biz Markie case, producers have sought alternative ways of repurposing existing musical phrases that do not fall foul of copyright law. What emerged was the practice of replaying, where a beatmaker fabricates their own version of a phrase that, ideally, they would have sampled, using live instruments and/or virtual instruments. Danny Brown's production team used this approach when making beats for the album *Old* after Brown was sued for an uncleared sample on his previous release *XXX*;[111] while replayed phrases might originally be deployed as replacements for the sounds they are imitating, they are unlikely to match the originals exactly, and they might even produce results that sound better to the artist, as Brown explains:

> [For] this album [*Old*] they was extra cautious and made sure we got everything cleared or we had to replay it. And we had to replay a lot of them, but they ended up coming out better than the actual sampled ones, to be honest.[112]

Thus, replaying is a very useful option to Brown as it allows him to rhyme on beats that he feels he works best on, without blunting his 'creative edge'.[113] With this said, however, replaying still resembles a pragmatic offshoot of sampling, albeit one that is facilitated by digital audio technology. I believe that the use of digital audio technology

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[109] *Deep Crates 2*, Weisfeld.
[110] Marshall, 'Giving up Hip-Hop's Firstborn', 869.
[111] Muhammad and Kelley, ''Putting The Pill In The Pudding': An Interview With Danny Brown'.
[112] Ibid.
[113] Ibid.

outside of sampling demands investigation, being a subject that has been largely neglected by the scholarship on hip hop music to date.

Schloss, informed by the many interactions he has had with sample-based beatmakers, claims: 'Hip hop producers who use sampling […] find it difficult to countenance other approaches without compromising many of their foundational assumptions about the musical form'.[114] I would not dispute that these 'foundational assumptions' continue to exist in the general musicality of hip hop production, but it should be clear that a much more welcoming view of hybridity in beatmaking technique emerged from the 1990s onwards. My findings – with regard for beatmaking styles particular to various region-specific and period-specific subgenres within hip hop – evidence combinations of live instrumentation, synthesis, and drum machines that are reconciled with the use of samples. While Schloss's research is to do with sampling from vinyl, he acknowledges in the Afterword of *Making Beats*'s 2012 edition that the sample-based beatmaker's golden rule of only sampling from vinyl is no longer adhered to with anything close to the same degree of dedication as before. Samples from CD and digital downloads are now commonplace due to the emergence of: 'a younger generation of producers who had been raised in the Internet era, and had already come to rely on those tools before they became producers in the first place'.[115] These digitally-procured samples are used in tandem with music production software in a way that sees virtual instruments cut and doctor them in innumerable ways. Here, the practice of sampling becomes a form of sound synthesis, with sampling being a 'carrier' signal and the digital manipulation of the virtual instrument being a 'modulator'; what results is a dialectical totality encompassing both derivative creativity and original creativity that continues to spur modern developments in beatmaking. It is also possible for this situation of samples being channelled into synthesis to assume an inverted form, where fragments of sound can be synthesised before being cut up like samples. This can be heard in the Vince Staples track 'Norf Norf' produced by Clams Casino,[116] which is based on a phrase derived from an

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[114] Schloss, *Making Beats* (Middletown, CT: Wesleyan University Press, 2012), 5.
[115] Ibid., 203-204.
[116] Vince Staples, 'Norf Norf', *Summertime '06* (Def Jam Recordings, Blacksmith Music, ARTium Recordings, B0023373-02, 2015).

improvisation recorded on a Roland Juno synthesiser before being cut up and looped.[117] This technique – subjecting synthesised sounds to the technical application of sampling – has also been practiced by DJ Shadow, who in a conversation with Clams Casino, alludes to his visits to a studio belonging to a collector of rare and unusual synthesisers for his more recent recorded output.[118] This belies Shadow's reputation as a producer of largely, or entirely, sample-based work, and serves to underline beatmakers' desires to reconcile ostensibly disparate technical approaches in order to find new sounds. The exposition of new affordances in existing technology is central to my research and will be discussed further as I address my research's creative practice element.

In a conversation between the producers DJ Premier and Prince Paul, the latter suggests that hip hop veterans like themselves should not need to feel that they have to *like* modern production trends, but they should at least try to *understand* them in an effort to nurture mutual respect across everything that falls under the banner of hip hop.[119] Furthermore, it is possible to find much common ground between elements of beatmaking from hip hop's 'golden age' and the trap style that dominates mainstream hip hop today, as Paul half-jokingly makes a point that he programmed rapid, stuttering hi-hats in fluctuating patterns using a Roland TR-808 drum machine on Stetsasonic's album *On Fire* (heard on the album's title track),[120] released at least two decades before it became a widespread compositional device in contemporary hip hop.[121] While there are certainly many similar common threads between the purported old school and new school, what interests me most is the history of the developments that materialised in between, why they came about, and how they support the aesthetics and priorities of hip hop and the broader black American musical tradition.

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[117] 'DJ Shadow and Clams Casino', *Talkhouse*.
[118] Ibid.
[119] 'DJ Premier and Prince Paul', *Talkhouse*, 2016, http://www.talkhouse.com/artist/dj-premier-prince-paul (3rd May, 2017).
[120] Stetsasonic, 'On Fire', *On Fire* (Tommy Boy, 1986).
[121] 'DJ Premier and Prince Paul', *Talkhouse*.

Chapter 2 – Listening, Feeling

Some who got
Psychoanalysis
To the point of paralysis
Can't think or move to the groove
At the same time
I got no points to prove.[1]

Dismantling the Lattice

As a large part of my research hinges on the analysis of examples of hip hop beats, exemplifying various styles from different periods and regions, the question of methodology surfaced at a very early stage in this project. Oftentimes in musicological studies, transcribed extracts of notation are presented to draw attention to specific facets of a composition or performance. In musics that are driven chiefly by the considerations of melody and harmony – those falling into the European 'classical' continuum – use of such extracts is entirely reasonable, though the intentions of the composer are assumed to be authoritative and for the most part they work necessarily within a standardised rubric of twelve fixed pitches repeating over octaves, so a certain degree of objectivity is taken for granted and enforced. This lends itself to a cerebral kind of analysis that can be enacted and communicated in transcription. However, when it comes to the study of a music such as hip hop, which does not hold melody and harmony as vital dimensions (if they are recognised as salient dimensions at all), the use of notated extracts in analysis needs to be questioned.

Joseph G. Schloss finds the use of notation incompatible with the analysis of hip hop beats due to a practical matter: 'to distinguish between individual instruments, as in a musical score, obscures the fact that the sounds one hears have usually been sampled

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[1] Chuck D, 'Three Pieces' in Miller, Paul D., (ed.), *Sound Unbound: Sampling Digital Music and Culture* (Cambridge, Massachusetts: The MIT Press, 2008), 337-342 (341).

from different recordings *together*'.[2] While Schloss has no real use for transcription in his work anyway, with it being rooted in ethnography of beatmakers rather than analysis of beats, his point is in concord with my view that a hip hop beat is best understood as a mass of implied gestures and flows of energy captured in sound. It is possible for an element of a beat, like a looping sample, to feature more than one discernible musical voice (a guitar riff accompanied by a sustained note from a brass section, for example), yet samples are treated as a singular 'instruments' when deployed by a beatmaker, and when they are placed in a mix, it is not always apparent – or indeed relevant – which sonorities are coming from which elements. For this reason, it would be imprudent to break a beat down like one might when analysing a symphonic work or a rock song. Despite this, examples of figures made up of transcriptions that use common practice notation are present in musicological accounts of hip hop. Robert Walser argues:

> despite the discouraging example of so many formalist analyses of popular music, it is possible to interpret notes as abstractions of performances with social meanings, and the terms and stakes of current debates over rap suggest that there are important reasons for doing so [...] I hope to explain to some extent the power and meanings of this music, but the analysis should also have the more basic effect of demonstrating the coherence and complexity of music which has been so widely dismissed as monotonous and impoverished.[3]

Walser's fleeting concession that notation constitutes abstraction deserves elaboration. Notation merely attempts to emulate a musical structure in a visual medium rather than offer the reader a real musical experience; what Walser does not justify to a satisfactory degree is how notated extracts can offer a true and useful picture of a musical fragment's 'coherence and complexity' in a way that respects the codes of the culture it belongs to. Walser insists that his use of transcription in his analysis of Public Enemy's track 'Fight the Power' is appropriate and grants the group's producers critical respect that musicology had previously 'denied' them,[4] but what kind of respect is it when the practical priorities that are particular to hip hop's artistry are ignored in favour of using European music's means of demonstrating musical sophistication? Would it not be equally wrong to judge the merits of a classical opera performance using the standards of

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[2] Joseph G. Schloss, *Making Beats: The Art of Sample-Based Hip-Hop* (Middletown, CT: Wesleyan University Press, 2012), 14.

[3] Robert Walser, 'Rhythm, Rhyme, and Rhetoric in the Music of Public Enemy', *Ethnomusicology*, 39/2 (Spring - Summer 1995), 193-217 (199).

[4] Ibid., 199-200.

freestyle battle rap? The latent political implications are bitter, and even as Walser claims that his notation-based analysis 'parallels the hip hop compositional process of laborious assemblage of separate voices through sampling, drum machines, and sequencing',[5] it overlooks the simple fact that the composition was produced by the Bomb Squad (Public Enemy's production team) using their ears, steered by their immersion in hip hop culture, as Hank Shocklee attests: 'we came from a DJ background, not a musician's background'.[6] Walser's notated figures may establish a rough idea of the number of simultaneous sonic elements audible in 'Fight the Power', but it does not carry any information pertaining to timbre, a dimension that is crucial in beatmaking. Since the spectral profiles of a hip hop beat's layers cannot be represented in notation, Walser's figure contributes little.

Acknowledging hip hop music's nature as a music that does not privilege melody and harmony, Justin A. Williams, in his study of hip hop music that samples from jazz recordings, notes:

> Rather than syntactical processes (melody and harmony and other musical features that can be represented in score notation), parameters such as timbre, instrumentation, and performance approach produces a particular jazz *feel* (notably, "swung" eight notes and expressive subsyntactical microrhythmic variations), as well as the timbre of the particular instruments from jazz performance.[7]

While the thrust of Williams's analysis is commensurate for how it observes black American musical priorities in timbre and the subtleties of rhythm, it nonetheless includes figures of notation to quote pieces of hip hop music.[8] Williams insists that this is only for 'illustrative purposes',[9] but what is being illustrated? It appears that even when musicology accepts that the values and devices of Western common practice are not suitable in the analysis of an example of certain type of music, it may still struggle to find a means of showing and explaining its musical logic, falling back on conventional notation

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[5] Walser, 'Rhythm, Rhyme, and Rhetoric in the Music of Public Enemy', 200.

[6] Ali Shaheed Muhammad and Frannie Kelley, 'Hank Shocklee: 'We Had Something to Prove'', *Microphone Check : NPR*, 2015, https://www.npr.org/sections/microphonecheck/2015/04/16/399817846/hank-shocklee-we-had-something-to-prove (14th June, 2017).

[7] Justin A. Williams, *Rhymin' and Stealin': Musical Borrowing in Hip-Hop* (Ann Arbor, MI: The University of Michigan Press, 2014), 55.

[8] Ibid., 38-39.

[9] Ibid., 55.

in lieu of a properly functional option. This can also be seen in Adam Krims's 'close reading' of the Ice Cube track 'The N**** Ya Love to Hate', as he maps out the composition using a 'layering graph', operating simply as a kind of surrogate for notation.[10] This visual device specifies pitch values, e.g. 'B♭', in its illustration of the beat's elements, but again, this is of no real analytical use when one considers hip hop's musical logic, nor does it offer any idea of what the elements actually *sound* like. For his illustrations of breaks, Rowan Oliver forgoes common practice notation in what he calls a 'Time Unit Box System', or 'TUBS', a grid-based system which he claims:

> usefully depicts the overall shape of patterns, whilst simultaneously allowing for focus on smaller subgroupings of either timespan or instrumentation. It leaves little room for ambiguity about which drum or cymbal is struck on which beat.[11]

With this, Oliver provides the reader with objective views of exactly where the drum hits of breaks lie, which is indeed useful for the purposes of his analysis on the breaks' internal structures. Nevertheless, this constitutes placing data on a 'lattice' in an abstraction of music's heard reality; what I desire is a method that taps into an experiential dimension, but this is made difficult by the apparent disjuncture between the faculties of language and music.

In his *Guide to Sound Objects*, Michel Chion summarises the nature of the problem that lies at the heart of studies which, explicitly or otherwise, establish a parallel between language and music:

> Such studies are generally on the abstract level of the two disciplines: the *linguistic* aspect for language, and what could be called *musicality* for music; to the detriment of their other, concrete side: *speech* and *sonority* respectively. In other words, language and music have been compared in their written, codified form.[12]

Here, Chion suggests that the cultural supremacy of inscription inhibits our ability to consider the expressive power in the extralinguistic, non-notatable nuances of what is heard by the ear. Chion finds that language and music are not analogous, since language

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[10] Adam Krims, *Rap Music and the Poetics of Identity* (Cambridge: Cambridge University Press, 2000), 97.
[11] Rowan Oliver, *Rebecoming Analogue: Groove, Breakbeats and Sampling* (PhD thesis, University of Hull, 2015), 53.
[12] Michel Chion, *Guide to Sound Objects*, trans. by John Dack and Caroline North (Leicester: EARS De Montfort University, 2009), 71-72.

depends on 'the sign' (in the semiotic sense of the word) to communicate meaning, which is subject to a degree of 'complete arbitrariness', whereas the potential of musical meaning is rooted in the perception of actual sound.[13] With this, music is assumed to have autonomy from the realm of linguistics and hence the capacity to possess meaning, while language can merely serve as a pragmatic conduit for meaning. Susanne K. Langer's work, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* offers some elaboration, explaining that music:

> 'is not, logically speaking, a language, for it has no vocabulary. To call the tones of a scale its "words," harmony its "grammar," and thematic development its "syntax," is a useless allegory, for tones lack the very thing that distinguishes a word from a mere vocable: fixed connotation, or "dictionary meaning."'[14]

The lack of 'fixed connotations' in actual, concrete sounds results in an inability for music to express meaning on a semantic level like language can.[15] Thus, the framework of notation, that is, the attempt to codify music visually through inscription in a manner resembling language, is not truly *musical*.

I refer to notation as a 'framework' because it is just that – a construction of fixed lines upon which note data can be mapped, resembling a grid, or 'lattice' as Trevor Wishart calls it.[16] Wishart argues that the lattice-based nature of notation, while practical and convenient for transcription, can be detrimental to musicality, leading to a kind of formalism: 'where there is no longer any experiential verification of our theories about how to compose music'.[17] It is this 'experiential verification' that I feel is lacking from musicological studies that address hip hop. None of this, however, is to say that notation should be written off as entirely useless to musicians, as the composer Ferruccio Busoni writes: 'Notation, the writing out of compositions, is first and foremost an ingenious means of pinning down an improvisation so that it can be revived at a later date'.[18]

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[13] Chion, *Guide to Sound Objects*, 84.

[14] Susanne K. Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (New York: New American Library, 1948), 185.

[15] Ibid., 188.

[16] Trevor Wishart, *On Sonic Art* (Amsterdam: Harwood Academic Publishers GmbH, 1996), 11.

[17] Ibid.

[18] Ferruccio Busoni, *Sketch of a New Aesthetic of Music* (London: Precinct, 2013), 24.

Busoni concedes that a piece of notation can be a dependable mnemonic, but also argues that the act of composition is not reducible to inscribing such pieces:

> Ultimately, I have come to the conclusion that every notation is, in itself, the transcription of an abstract idea. The moment it's captured by the pen, the idea loses its original form. Before you even begin to write down the idea, you have to decide on a metre and key. The form and the musical agency chosen by the composer determine the trajectory and the limits of the work.[19]

Notation is an instrument of fixity, and as such, it is incompatible with the ever-changing impetus of human creativity. Moreover, it cannot be relied on to capture the infinitesimally small, but nevertheless vitally important details of sounds; aligning notation with the broader European cultural trajectory, spectralist composer Ana-Maria Avram argues:

> The European metric system is an abstract model which allows you to place things with other abstract elements. It's a practical fix placed over an ideology: an a priori before the sound itself.[20]

Avram insists that music's power lies in the lived experience of the 'becoming and the transcendence' of sounds, which is something that cannot be emulated by reading notation.[21] In supporting this, I have established that one cannot approach music genuinely with a mindset that is geared towards reproducing the fixity of language and inscription, but this is not to say that music cannot be understood as another form of communication.

Wishart identifies a counter-hegemonic inclination in musical practices that eschew any need for notation, finding that:

> Music as an alternative mode of communication […] has always threatened the hegemony of writing and the resultant dominance of the scribehood's world-view. Therefore, from the earliest times, attempts have been made to lay down what could and could not be accepted as 'correct' musical practice.[22]

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[19] Busoni, *Sketch of a New Aesthetic of Music*, 28.
[20] Guillaume Ollendorff, 'At the Heart of Chaos' in Wilson, Andy (ed.), *Cosmic Orgasm: The Music of Iancu Dumitrescu and Ana Maria-Avram* (London: Unkant Publishers, 2013), 163-169 (165).
[21] Costin Cazaban, 'An Adventure in Experimental Music' in Wilson, Andy (ed.), *Cosmic Orgasm: The Music of Iancu Dumitrescu and Ana Maria-Avram* (London: Unkant Publishers, 2013), 109-124 (112).
[22] Wishart, *On Sonic Art*, 14.

The 'scribehood' that is referred to here is the European scholarly class which, historically, has manoeuvred to police culture by instigating and controlling the repositories of human knowledge – the historical expansion of common practice notation and the resultant propagation of standardisation in music exemplify this. By refusing notation, relying instead on more intuitive and improvisatory impulses, musicians can tap into a realm of communication that is to do with *expressing* emotions that language can only *refer* to. Wishart ventures:

> There is an immediate dialectic of musical action and experience by which music reaches directly to us in a way which language can never do, communicating powerful messages which are not refutable within the socially-approved categorical systems of any scribe-culture. It is music's intrinsic irrefutability, its going behind the back of language, which has caused it to be viewed with so much suspicion and disdain by guardians of socially-approved order.[23]

The idea that music operates on a more primal, emotional level of meaning will be explored further shortly, but at this point it is necessary to return to the critical reception of black American culture in order to consolidate an understanding of hip hop's status as a music that cannot be explicated in notation.

Since hip hop, as a strand of black American culture, is a music that cannot be captured by inscription, it embodies a spirit of counter-fixity that not only sees it divert from the standardisation of European culture, but also the less foregrounded standardisation of its own roots. Russell A. Potter reflects:

> African-American music is fundamentally at variance from "Western" music, with its obsession with the precise reproduction of written notation, and indeed at variance from itself; when New Orleans jazz evolved into swing, or the hard boppers broke from swing, or the "cool" jazz school drifted away from hard bop, these new forms were Signifyin(g) on their precursors.[24]

The premise that hip hop music has undergone a comparable series of evolutions to those of jazz through counter-fixity driven by signifyin(g) is crucial to my thesis. The reasoning behind my emphasis on this argument is provoked by a dissatisfaction with musicology that, in effect, works only to describe and compartmentalise musics that are

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[23] Wishart, *On Sonic Art*, 17.
[24] Russell A. Potter, *Spectacular Vernaculars: Hip-Hop and the Politics of Postmodernism* (Albany, NY: State University of New York Press, 1995), 27-28.

antithetical to such treatment. This dissatisfaction can also be found in the criticism of other domains of culture; regarding visual art, bell hooks, in her appraisal of black American artist Jean-Michel Basquiat's output, finds that:

> In keeping with the codes of that street culture he loved so much, Basquiat's work is *in your face*. It confronts different eyes in different ways. Looking at the work from a Eurocentric perspective, one sees and values only those aspects that mimic familiar white Western artistic traditions. Looking at the work from a more inclusive standpoint, we are all better able to see the dynamism springing from the convergence, contact, and conflict of varied traditions.[25]

As Eurocentric art critics may fail to appreciate the gestural verve of a Basquiat piece, Eurocentric musicologists may fail to hear hip hop's 'blackness', that is, the constellation of versioning, looping, and improvisation that materialises as black American musicians practice signifyin(g) through the inversion of language and the (mis)use of electronic technologies. Supporting the assertion that you cannot apprehend hip hop on a practical, musical level using anything other than its own terms, Shocklee remembers:

> We [Public Enemy] had to prove that we were viable enough to make a record on a major label – or any label. Because at the time R&B was the day […] if you think about all the records that were made back then, they were all made by musicians. You know, the producers were musicians. And so everybody talked in language that was understood. Meanwhile hip-hop had its own language, its own vibration, its own feel. And it was counter what was going on musically.[26]

Here, Shocklee distinguishes between 'musicians', meaning those with training in music rooted in the system of Western common practice and/or proficiency on a conventional musical instrument, and hip hop practitioners, who struggled to have their artistry taken seriously despite hip hop culture's richness. Hence, if musicology is to respect the music it is studying, it must use terms and devices that are appropriate, as Lawrence Ferrara argues:

> There is a bond of organicity which grounds the analysis in the work and which is articulated by the intersection of meanings that the work projects and the analysis records [...] Given this organic bond between the work and its analysis, certainly the inherent laws of the work must carry through and rule the evaluation of the analysis.[27]

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[25] bell hooks, *Outlaw Culture: Resisting Representations* (New York, NY: Routledge, 1994), 27.
[26] Muhammad and Kelley, 'Hank Shocklee: 'We Had Something to Prove''.
[27] Lawrence Ferrara, 'Phenomenology as a Tool for Musical Analysis', *The Musical Quarterly*, 70/3 (Summer, 1984), 355-373 (373).

If a music is loop-based and places an emphasis on the complexity of its textures, then the musicologist should be sufficiently prepared to examine the sonic intricacies of a groove and its constituent layerings. In short: the music must lead the analysis, not the other way around. There are examples of musicology that succeed in this regard; in Oliver's analysis of the classic break from James Brown's 'Funky Drummer', a 'TUBS' figure is included which not only indicates which beats the drum strokes lie on, but also what types of strokes are used, offering a vital consideration of timbre. Furthermore, it provides the reader with an idea of how musical agency can be exercised by a performer, something that conventional notation is not designed to achieve.[28] Oliver uses this figure to reinforce his argument that the break's palpable kinetic energy comes from drummer Clyde Stubblefield's variations in timbre between strokes – an approach that has often been taken by drummers in black American music at large.[29] The ramifications that timbre has for rhythm evidence a degree of complexity that would problematise any view that rhythm is reducible to the arrangement of notes that fit into even subdivisions of time as might be conveyed in notation.

Scholarly analysis of the kind demonstrated by Oliver can be useful for how it highlights and explains the workings of music in minute detail, homing in on the technical agencies of musicians using suitable language and figures. What is less convincing, however, is the efficacy of such analyses in communicating the kinds of feelings a listener might take from a piece of music. Krims suggests that a close reading of a hip hop track should not have any use for terms and concepts particular to Eurocentric music analysis like '"middleground *Zugs*" or particular re-harmonizations of melodies', but should identify a prevailing feeling, like something as simple as 'hard', and then expound on how this feeling is achieved.[30] Even when this is attempted, however, the problem of the chasm between actual musical experience and descriptive language remains. This problem is

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[28] Oliver, *Rebecoming Analogue*, 67.
[29] Ibid., 68-69.
[30] Krims, *Rap Music and the Poetics of Identity*, 31.

attacked with tenacity by Langer, and it is in her work that I believe a way forward can be found.[31] Finding the crux of the problem, Langer states that language:

> merely names certain vaguely and crudely conceived states, but fails miserably in any attempt to convey the evermoving patterns, the ambivalences and intricacies of inner experience, the interplay of feelings with thoughts and impressions, memories and echoes of memories, transient fantasy, or its mere runic traces, all turned into nameless, emotional stuff.[32]

Langer tasks herself with making sense of human emotion as a type of extralinguistic meaning that 'belongs to the sensuous construct',[33] sidestepping the outlook of logician philosophy in a bid to examine how music parallels feeling in a way that language cannot approach. It is in this idea that I believe hip hop's musical effects/affects can be best understood.

Morphology of Feeling

The idea that there is a connection between music and human emotion is not a particularly esoteric one, as Langer notes that it has been: 'respectable enough to have led some very factual-minded modern psychologists to conduct tests for the emotional effects of different compositions and collect the reported data'.[34] Prompted by the results of such studies, Langer lists some 'effects' that have been thought to stem from listening to music, including 'Sad', 'Patriotic', and 'Longing'.[35] Langer is quick to dismiss the suggestion that music can convey conceptions of emotional states that are so easily defined in adjectives, reiterating that: '*music articulates forms which language cannot set forth*'.[36] With this statement, it is established that as a note on a notated figure does not reflect the experience of a musical sound, a written adjective does not reflect the

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[31] *Philosophy in a New Key* can make for uncomfortable and frustrating reading in how it exposes Langer's racism – this can be seen, for instance, in this statement regarding fairy tales: 'Here we have a literary product belonging to the civilized races of Europe just as much as to the savage cultures of darker continents'. With such toxic manifestations of Eurocentrism present in her text, I would have to imagine that Langer would not be sympathetic to my work here. Nevertheless, her writing on what music *is* and language's failure to capture its essence is helpful and powerful, and so I cite it advisedly.

[32] Langer, *Philosophy in a New Key*, 141.

[33] Ibid., 169.

[34] Ibid., 172.

[35] Ibid.

[36] Ibid., 189.

experience of a human emotion; there is a cohesion between music and emotion in their transcendence of language and transcription.

Langer argues that rather than communicating an inflexible definition of a singular emotion: '*what music can actually reflect is only the morphology of feeling*',[37] so the development of sounds over time can invoke motion between emotional states – music's impetus, as a necessarily temporal and extra-linguistic medium, involves action, causality, and transformation. Langer elaborates:

> It [music] is a form that is capable of connotation, and the meanings to which it is amenable are articulations of emotive, vital, sentient experiences. But its import is never fixed. In music we work essentially with free forms […] and take interest in possible articulations suggested entirely by the musical material'.[38]

To invest in this idea is to posit that music can be regarded as the most immediately expressive of artforms. Seeking to highlight the significance of this, improvising musician and contemporary music scholar Gustav Thomas ventures:

> People underestimate the extent to which music is fundamental to everything. It is fundamental to everything because, if nothing else, it's a manifestation of the human spirit: no matter what you choose to call it, there is something in us that is not made of physical matter, yet is inseparable from our corporeal state; that not only animates our perishable biology but, through its immateriality is able to flow between our otherwise distinct and separate bodies.[39]

This claim affirms that music constitutes a compelling conduit of ineffable meaning 'beyond language', making its appropriation and commodification by the dominant culture all the more questionable.[40] Speaking of the purported emotional potency of hip hop music, Saul Williams argues:

> No other musical form has created such a raw and visceral connection to the heart while still incorporating various measures from other musical forms that then appeal to aspects of the

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[37] Langer, *Philosophy in a New Key*, 193.
[38] Ibid., 195.
[39] Gustav Thomas, 'The Impossible Vs. the Unthinkable: A Sequel to 'Wild Productivity in the Age of Evaporation'', *Claws & Tongues*, 2016, https://clawsandtongues.wordpress.com/2016/11/09/the-impossible-vs-the-unthinkable-a-sequel-to-wild-productivity-in-the-age-of-evaporation (31st March, 2017).
[40] Ibid.

emotional core of an individual. Music speaks directly to the subconscious. The consciously simplified beat of the hip-hop drum speaks directly to the heart.[41]

To what degree and in what way, then, does hip hop – a music with an extensive history of reckoning with appropriation and commodification – operate as a music that performs a 'morphology of feeling'?

Although Langer does not believe that music can effect long-term changes in human behaviour, she declares that: 'Music is known, indeed, to affect pulse-rate and respiration, to facilitate or disturb concentration, to excite or relax the organism, *while the stimulus lasts*'.[42] Instances of audiences responding to music with intense excitement have been seen in hip hop music from even the very earliest incursions of the culture; Rahiem of Grandmaster Flash's Furious 5 group of MCs recalls:

> Every time Flash played "Listen to Me" by Baby Huey, there was some kind of violence […] It was a [sic] up-tempo song, but it was a dark song […] I can't even remember all of the words to the song, but I can tell you this: the words were not violent enough to where, when they played it, it incited some kind of violent act. It wasn't that kind of a song, but I think just the overtones of that music just brought about a certain mood, and every time… I mean, Pow! They let off shots.[43]

Here, Rahiem insists that it was not the lyrical content of 'Listen to Me' that provoked violent excitement, but the recording's sonorous qualities when played over Flash's large sound system. Although 'Listen to Me' was a funk record produced before the 1970s South Bronx block parties came into fruition,[44] its use in an early hip hop context, with bass-heavy sonic force behind it, repurposed the composition. The potential for recorded music to induce raucousness in crowds has also been realised in tracks that were recorded within hip hop culture – often with the intention to provoke crowds in this way on purpose. Roni Sarig's focus on Memphis hip hop music of the 1990s finds an emphasis on the expressions 'buck jump' and 'getting buck', the former being a kind of jerky, footwork-oriented street dance and the latter being a synonym for 'get hyped', or 'get

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[41] Saul Williams, *The Dead Emcee Scrolls: The Lost Teachings of Hip-Hop* (New York, NY: Pocket Books, 2006), xi.

[42] Langer, *Philosophy in a New Key*, 171-172.

[43] Jim Fricke, Charlie Ahearn, and Nelson George, *Yes, Yes, Y'all: The Experience Music Project Oral History of Hip Hop's First Decade* (Boston, MA: Da Capo Press, 2002), 92.

[44] Baby Huey, 'Listen to Me' (Curtom, 1971).

excited'.[45] The dance, also known as the 'gangster walk', became popular before the phrase 'get buck' became a part of Memphis hip hop culture, and it prompted the Memphis-based artist SMK to produce the single 'Da Gangsta Walk' in 1991.[46] The track's busy, layered drum machine beats play against a steady three-note riff that interpolates the 'bones' loop from the cult classic early 1980s hip hop single 'Drag Rap' by The Showboys to make for a densely polyrhythmic propulsive shuffle, and the intermittent group chants of 'get buck!' lend the loops a loose, human energy.[47] Also from Memphis, the group Three 6 Mafia channelled the 'buck' style on their single 'Tear Da Club Up', a track that Sarig finds was inspired by the 'rowdy energy' of Memphis's clubs.[48] The track's beat, featuring coarse synth figures and a stuttering TR-808 drum pattern performs a similar trick to 'Da Gangster Walk', where the noisy, almost lo-fi combination of loops prompts a belligerent, insistent chanted vocal hook.[49] To observe 1990s Memphis hip hop in this way is to see the how hip hop music can rouse human emotions, but with hip hop beats being predicated largely on repetition more than linear development, how does it square with Langer's thesis that music is to do with morphologies between emotions more than the quality of individual emotions?

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[45] Roni Sarig, *Third Coast: OutKast, Timbaland, and How Hip-Hop Became a Southern Thing* (Boston, MA: Da Capo Press, 2007), 65-66.
[46] Ibid., 67.
[47] SMK, 'Da Gangsta Walk' (Brutal Records, 1991).
[48] Sarig, *Third Coast*, 276-277.
[49] Three Six Mafia, 'Tear Da Club Up', (Brutal Records, Priority Records, 1996).

Fig. 2.1 – CD single of 'Tear Da Club Up' by Three Six Mafia

I propose that through the vertical stacking of elements in the production of hip hop beats, which adheres to the concept of 'layering' in hip hop's scheme of aesthetics as Tricia Rose observes it (alongside 'flow' and 'rupture'),[50] beatmakers suggest morphologies between sounds that play simultaneously as opposed to being presented one after the other over a track's duration. While this may complicate the scope of causality over time that is assumed to exist by the word 'morphology', it is possible to hear different kinds of feeling in different elements of a loop, which the listener can unpack, absorb, and juxtapose in real time. Some justification for this embellishment on Langer's idea can be found in the perspective of the producer RZA, who reflects:

> In the beginning, I had no true understanding of how music works – theory, harmony, chords. I had no idea about the way it's traditionally structured. But in a way, this was one of those rare cases where a *lack* of knowledge was power, because there wasn't anything to

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[50] Tricia Rose, *Black Noise: Rap Music and Black Culture in Contemporary America* (Middletown, CT: Wesleyan University Press, 1994), 38.

get in the way of what I wanted to express. I just took sounds that sounded good to my ear and put them together. They were probably disharmonized and not in sync, but I could feel how they should fit as a whole.[51]

Here, RZA argues that by not having any training in Western music theory, he was able to put sounds together intuitively based only on what his ears were telling him; even when his chosen sounds were assembled coarsely, not necessarily looping neatly, they nevertheless retained expressive musical functionality. To corroborate this, I refer to a section of an italicised refrain in Robin D. F. Kelley's text *Race Rebels: Culture, Politics, and the Black Working Class,* which reads:

> *hip hop must be understood as a sonic force more than anything else. You can't just read about it; it has to be heard, volume pumping, bass in full effect, index finger in reach of the rewind button when a compelling sample, break beat, or lyric catches your attention.[52]*

The real power of a hip hop beat lies not in any sort of technical exactitude, but in the immediate, arresting 'force' of stacked elements playing against each other. I wish to reach further into the musical faculties of this force as I study beats; this will require a new strategy of listening that considers not only the sonics of a beat as they exist in material reality, but also my own perception of them.

Musical Phenomenology

After encountering the music of spectralist composer Iancu Dumitrescu, whose work eschews melody and embraces noise through wildly expressive sonic gestures, I sought to understand his philosophical outlook and how it feeds into his musical approaches. I found that the conductor Sergiu Celibidache taught Dumitrescu how to perform a sort of meditation informed by Edmund Husserl's 'phenomenological reduction',[53] where the subject uses their own intuition to study an object very closely, putting aside any aspect of their perception that stems from prior knowledge so that the most innate, inalienable facets of the object can be identified. The manner in which Dumitrescu applies this way of thinking to his musical practice, and my own proposal of its implications for hip hop

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[51] The RZA and Chris Norris, *The Wu-Tang Manual* (New York, NY: Riverhead Books, 2005), 204.
[52] Robin D. G. Kelley, *Race Rebels: Culture, Politics, and the Black Working Class* (New York, NY: The Free Press, 1996), 227.
[53] Ollendorff, 'At the Heart of Chaos', 163.

beatmaking will be addressed shortly, but first it is necessary to clarify the ideas of phenomenology that I regard as being most salient to music.

Husserl explains that the first step towards realising a 'transcendental analysis' of an object is to switch from having a 'natural attitude' to a 'phenomenological attitude',[54] where it is not only the object that is being considered, but the external factors that colour our perception of it – the nature of the object's *appearance* in addition to the object itself. Husserl calls the suspension of belief that this change of attitude entails the '*epoché*', which means to put what is less than essential about an object of perception into metaphorical 'brackets'.[55] Once this is done, it is possible to discern the 'essence' of the object, that is, the object's fundamental characteristics which if taken away in the subject's imagination would mean that the subject would be imagining something different.[56] With this process in mind, how can the 'essence' of a piece of music be found in practice?

Applications of phenomenology in music analysis have been attempted before. Philip Batstone clarifies the real goal of such an approach, stating that: 'It leads back to the music rather than providing conclusions'.[57] With this view, phenomenological music analysis is not to do with using music as a stepping stone towards a set of extramusical ideas or facts – rather, it is a means of extracting as much musical information as possible from a piece and then organising this information, highlighting the most elemental aspects. Batstone considers Schenkerian analysis in Western music, where one would start at the 'surface' of a piece to register the level of small musical details, and then proceed to find the deeper levels of organisation, that is, devices which may be markedly less obvious to the listening ear, but nonetheless comprise the piece's overarching structure.[58] The idea of beginning at a piece's surface and working deeper into its

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[54] Edmund Husserl, *The Basic Problems of Phenomenology: From the Lectures, Winter Semester, 1910-1911*, trans. by Ingo Farin and James G. Hart (Dordrecht: Springer, 2006), 3.

[55] Ibid., 35.

[56] Edmund Husserl, *Phenomenological Psychology: Lectures, Summer Semester, 1925* (The Hague: Martinus Nijhoff, 1977), 69.

[57] Philip Batstone, 'Musical Analysis as Phenomenology', *Perspectives of New Music*, 7/2 (Spring - Summer, 1969), 94-110 (95).

[58] Ibid., 96.

workings to find its 'essence' is a helpful one, and it is easy to understand Batstone's reasoning for suggesting that Schenkerian analysis has a phenomenological impetus, but in his subsequent analysis of an Anton Webern piece presented to demonstrate the idea in practice, it is much more difficult to detect a true foregrounding of musical experience.[59] The analysis as it appears on the page is based more on the use of the graphical abstraction, that is, notation. Perhaps it is Batstone's own ear that guided the analysis, but the results remain disconnected from the materiality of the object (the actual audible music), let alone his experience of it, so this can hardly be considered truly phenomenological.

Ferrara's 'Phenomenology as a Tool for Musical Analysis' offers a critique of formalist approaches to analysis like Batstone's, albeit concurring with Batstone's assertion that a phenomenological analysis necessarily 'leads back to the music'. Ferrara ventures:

> Phenomenologists presume that what one hears is affected by how one hears. […] A distinctive phenomenological tactic is that, rather than manipulate a work through a formal grid of analytical questions or positions, one responds to questions posed by the work. The interpreter discovers that, in the traditional sense of the terms "subject" and "object," he is now object; the music, as subject, questions the analyst.[60]

The subject/object relation is thus treated as an invertible dualism where the analyst conducts a self-interrogation, uncovering the conditions of their perception in addition to seeking to understand a certain object. Ferrara justifies this by stressing music's 'human presence';[61] music is, strictly speaking, a human construct, so a proper study of music should integrate a study of the people involved in both its composition and reception. In my research, this has entailed a consideration of the different contexts that beatmakers have worked in, and the factors that colour my own subjectivity as I reflect on hip hop beats. Ferrara proposes a strategy for phenomenological music analysis that includes an initial 'open' listening to orient the analyst, a 'syntactical' listening where any 'semantic' dimensions of the reception of the music are 'bracketed out' (as in the *epoché*) to leave only a sense of how the sounds develop, and then a 'semantic' listening which considers what the sounds could possibly signify, before one more final 'open' listening to reflect

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[59] Batstone, 'Musical Analysis as Phenomenology', 97.
[60] Ferrara, 'Phenomenology as a Tool for Musical Analysis', 356.
[61] Ibid., 357.

on the results of the previous three listenings put together.[62] As I have stated, I do not believe that a 'semantic' dimension of music analysis can be of any real use. Using his strategy, Ferrara conducts an analysis of the piece *Poème électronique* by Edgard Varèse where he claims to find meanings to do with '*time*' (from the sound of a bell tolling), '*technology*' (from some electronic sounds), and '*human existence*' (from human singing voices).[63] I feel that these findings are much too facile and cannot be reconciled with any listening of the piece's 'morphology of feeling'. I do, however, believe that Ferrara is correct to include a stage of 'syntactical' stage of listening, as this is where phenomenology is present and useful. With what tools, then, can this type of listening be performed?

My background in studying and composing *musique concrète* has seen me engage extensively with the work of Chion, who offers an exhaustive commentary of *musique concrète*'s ideas and priorities in his text *Guide to Sound Objects* – it is in this text that useful links between phenomenological thought and strategies of close listening to sounds can be found. Chion expounds his focus on the 'acousmatic situation',[64] where sounds are removed from the contexts that produced them so that the listener focuses only on what their ears are registering in the moment, by aligning the idea of 'reduced listening' with the use of Husserl's *epoché*; everything about a sound ('its real or supposed source and the meaning it may convey') is bracketed out, leaving only the sound itself, that is: 'its materiality, its substance, its perceivable dimensions'.[65] Once a sound has been removed from any extraneous information that we may ordinarily assume about it, Chion insists that we must make a distinction between the hard, physical reality of the sound and the sound as we perceive its qualities (in a phenomenological sense) in order to produce what can be called a 'sound object', using the analogy that we would not perceive a colour by its physical wavelength, but by how it appears to us when we see it.[66] In the sound object, I discern great potential in unlocking

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[62] Ferrara, 'Phenomenology as a Tool for Musical Analysis', 359-360.
[63] Ibid., 368.
[64] Chion, *Guide to Sound Objects*, 11.
[65] Ibid., 30-31.
[66] Ibid., 15.

the emotional 'meaning' of music, both as a musicologist and a creative practitioner – indeed, I intend to blur the lines between these roles in due course.

Returning to spectral music, which entails extensive close listening to sounds before refining them for the purposes of composition, Dumitrescu explains his practice, as informed by Husserl:

> I listen meditatively to an acoustic phenomenon. I want to surprise its natural direction, its noematic tendencies, the sense of its sonic matter. I contemplate matter for a long time, a little detail; to see, understand where it is going to evolve, what its natural tendencies are… The intuition has to liberate itself from factitious things.[67]

Dumitrescu's method sees him refining what he regards as a sound (object)'s essential component, stripping it of the sonic ballast around it through an intensive kind of subtractive synthesis. The purpose of this is to prepare a potent musical material which can be deployed as part of a highly expressive composition, where the resultant music is constructed not by mental abstractions, but by the faculties of the sound objects operating as automatically functioning generative materials, as Dumitrescu explains:

> In music, I am in search of this 'Ur-phenomenon,' the primordial fact, where I feel the initial essence of the musical fact. For that, you will not find melodies, figurations, frequencies from me. What will you find then? You will find an embryo in it which generates, by itself, the music. It generates itself. When I attain the elementary and find myself on the level of the components of the sound, I then sense, to have touched the germinal fibre, the embryo of life, incipient from something mysterious.[68]

This 'primordial fact' of music, as I understand it, is the element which serves as a vehicle for Langer's 'morphology of feeling', where music represents not meanings that can be notated, but the dynamism of the ineffable emotional resonances that stem from lived experience. In hip hop music, I consider the constituent parts of beats to be possible sound objects, where their apparent sources can be discarded in the imagination as they are balanced against one another in compelling looping phrases.

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[67] Jerome Noetinger, 'Iancu Dumitrescu: On the Inside Looking In' in Wilson, Andy (ed.), *Cosmic Orgasm: The Music of Iancu Dumitrescu and Ana Maria-Avram* (London: Unkant Publishers, 2013), 88-93 (89).
[68] Josh Ronsen, Gilles Peyret & Serge Leroy, 'Iancu Dumitrescu – Acoustmatic Provoker' in Wilson, Andy (ed.), *Cosmic Orgasm: The Music of Iancu Dumitrescu and Ana Maria-Avram* (London: Unkant Publishers, 2013), 7-83 (34).

Dumitrescu's application of phenomenology has been pivotal in my research for how it has shaped my understanding of music's ontology. However, I am not about to claim that beatmakers, or any other musicians involved in hip hop, are necessarily going about their craft with phenomenology in mind, nor do I wish to attempt something as problematic as to 'elevate' hip hop to the status of avant-garde European culture. Rather, I wish to highlight the commonalities between spectralism and hip hop in terms of the emphasis of sonic force – the organicity of timbre and texture – so that I can pursue a scheme of analysis that is faithful to the music as it is heard and experienced, not as it is notated, abstracted, and fixed. In my comparison of spectralism and hip hop music, I find them to be equals in how they embrace and refine noise and disorder to find compelling musical logics, as disparate as their broader parent cultures may be.

Dumitrescu's spectral composition method involves the use of extended instrumental techniques and signal processing to isolate and amplify certain sounds or internal characteristics of a sound. The piece 'Pierres Sacrées' consists of materials derived from 'prepared piano, plates and metallic objects' that are subjected to electronic processing in a way that is reminiscent of a *musique concrète* piece; the musical result is an uneasy, dynamic soundscape, with bursts of highly resonant sound emerging, seemingly from nowhere due to their brisk onsets, to carve through a bed of quiet ambience.[69] To attempt to represent it graphically would be as difficult as it would be useless. What I find most striking about the sounds heard in 'Pierres Sacrées' is that while it is possible to imagine how the specified instruments/physical objects could have produced them, they are nonetheless unique in their particular timbral qualities and modulations because of Dumitrescu's careful sonic bracketing. In hip hop beats, a comparable sort of bracketing can be identified in the chopping of samples, use of effects (such as EQ and filtering), time and pitch-based processing (time stretching, pitch shifting, and pitch scaling), and synthesis (particularly in more recent strains of hip hop). While I acknowledge that the extra-sonic significations of sounds derived from certain sources, crystallised by the histories of their technologies and hip hop's musical antecedents (or occasionally

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[69] Iancu Dumitrescu, *Pierres Sacrées* (Edition Modern, ED MN 1003, 1991).

contemporaries), can be considered salient in the reception of hip hop beats, I maintain that my focus must never stray from the varying colours of hip hop music's 'sonic force'.[70]

Another significant technique in beatmaking is that of mixing simultaneous samples, a form of layering which has a different impetus to the aforementioned methods of musical bracketing for it is additive rather than subtractive, combining sounds to achieve new gestalts rather than removing unwanted elements around a single sound. Rowan Oliver finds that De La Soul's track 'Ring Ring Ring (Ha Ha Hey)' achieves a deft groove in its combination of two samples: the simple, solid break of the Honeydrippers' 'Impeach the President' and the looser, jauntier bass line of the Whatnauts' 'Help is on the Way'.[71] While the constituent parts will be recognisable if one has spent enough time listening to hard funk and 'golden age' hip hop, the combination stands alone as a single groove, operating as a new 'sound object' that, as Oliver points out, is not the result of technological processing or manipulation, but of layering.[72] By listening to such a groove in a purely musical – and indeed phenomenological – capacity, one overlooks the fact that it is the combination of two constituent parts of disparate origins and only hears the musical logic of the new rhythms and timbres. Oliver observes that the concept of layering two sounds to create a new, single sound is applicable to both looping phrases and short, individual accents, producing 'composite textures'.[73] With this, the beatmaker can practice layering at both a macro and micro level to produce new materials on the vertical axis of timbre and texture. The groove is completed by a synthesis of this vertical axis and the horizontal axis of time as the sounds are made to play in rhythms, be they stemming from a combination of existing phrases playing in loops or the more hands-on approach of the beatmaker composing a new rhythm part with chopped individual hits. By treating sampled and synthesised sounds in a manner that is analogous to the use of 'sound objects' in *musique concrète* and spectral music, refining these sounds through acts of sonic 'bracketing' (such as chopping and processing) and creating new musical

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[70] Kelley, *Race Rebels*, 227.
[71] Oliver, *Rebecoming Analogue*, 117.
[72] Ibid.
[73] Ibid., 129.

phenomena by layering, hip hop beatmakers make music that can encapsulates gestural energy and emotional excitation.

Creative Practice as a Musicological Method

Although I consider both the phenomenological approach to listening and the rejection of notation to be steps in the right direction for a method of music analysis that aims to capture what music actually *is* and how it works, the problem remains that scholarly accounts of music rely on language to communicate findings, and language, as I have argued in this chapter, operates on a different plane of meaning to music. Fred Moten, probing this problem, offers:

> Ultimately, the difference between the impossibility of bringing simple objects into discourse and the achievement of complex objects' irruption into discourse is the difference between ostension and improvisation. Ostension is an enactment on the other side of linguistic failure; improvisation is sounding in linguistic failure.[74]

Moten suggests that by acquiescing to the fact that any attempt to note the actual materiality of an object in text by presenting it as an example ('ostension') cannot be considered sufficient, and instead riffing on the inadequacies of text, it may be possible to represent the object not in a fixed state, but in a more dynamic hypothetical form that is shaped entirely by the same creative energies that brought it into being from the outset, and will persist in order to prolong its power.

In practical terms, Moten alludes to the use of poetic, creative writing in place of descriptive text as a more effective means of reflecting the expressive power of music:

> In the end I want to talk about music, not as that which cannot be talked about but as that which is transferred and reproduced in literature as a function of the enabling disability of the literary representation of aurality.[75]

With this, the failure of descriptive writing to parallel the dynamism of a piece of music does not necessarily condemn language to be entirely amusical; writing on music can

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[74] Fred Moten, *In the Break: The Aesthetics of the Black Radical Tradition* (Minnesota, MN: University of Minnesota Press, 2003), 142.
[75] Ibid., 175.

assume its own form of musicality, albeit a musicality which accepts the music it is provoked by as its point of departure. In my research, I seek to explore how styles of hip hop beats have evolved and proliferated, with the beats themselves being the principal objects of study; it is difficult for me to conceive of how I could formulate a scheme of creative writing to execute this, but I may be able to find a way forward through my extensive experience as a musician.

Concerning scholarly work on contemporary music, Wayne Marshall notes:

> Despite the advent of powerful computer software for making and manipulating music and for publishing immediately in multimedia form, our pedagogical and publishing practices remain largely confined to drop-the-needle style examples and prose or graphical representations.[76]

The traditional approach to doing musicological work has remained text-based and dependent on ostension, as observed by Moten. This is not compatible with the ways in which modern popular music is produced and disseminated. In a bid to bring musicology onto the same level as the music it addresses, Marshall advocates 'musically expressed ideas about music', which are to do with using creative practice as a musicological method that can help us understand and demonstrate how certain musics function.[77] Marshall elaborates:

> I would like to advance the notion of what we might call techno-musicality – by which I mean, the use of music-making technologies not only to *understand* the styles and genres and practices we study, especially in the realm of contemporary popular music [...] but also to *express* the critical and cultural perspectives we bring to bear on the music we study.[78]

By becoming practitioners of a musical style through adopting its technologies and compositional sensibilities, musicologists can learn from and esteem a culture genuinely while contributing to its fabric as opposed to observing it from a distance and othering it. Marshall goes on to argue that this techno-musicality can be extended to guide the dissemination of musicological work in addition its production in that technologies such

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[76] Wayne Marshall, 'Musically Expressed Ideas about Music: Techniques and Technologies for Performing Ethnomusicology in the Digital Age', *wayne&wax*, 2006, http://wayneandwax.blogspot.co.uk/2006/04/musically-expressed-ideas-about-music.html (7th March, 2017).
[77] Ibid.
[78] Ibid.

as Internet resources can be used to interact with a musical culture and share ideas in a way that reflects how the popular and contemporary music is shared and consumed.[79] Such a way of conducting research is complimentary to my view that hip hop music has been such a potent cultural force because of its necessarily unfixed character – its manifold evolutions have been to do with hands-on creative experimentation using a variety of technologies as opposed to any kind of adherence to instructions on how to produce it correctly or authentically. What I glean from listening to a range of beats with an analytical ear, I channel into my own musical practice so that I can communicate my findings and cultivate new ways of thinking about how beats can be made while upholding a respect for hip hop's main aesthetic priorities. The practical engagement of techno-musicality has formed the basis of what I believe is my research's most novel and illuminating methodological approach; prior to completing *Hexagrammar* – the collection of beats that should be played as a supplement to this written thesis – I produced four beat tape releases over the duration of my research project which enabled me to immerse myself in the context of hip hop beatmaking and afforded me a way to test the viability of my technical and musical ideas.[80]

Where the first of these beat tapes, *A.M. Beat Tape*, was the result of my attempt to establish a routine of musical practice ('A.M.' referring to how I made a beat at my desk every morning), working in a relatively conventional sample-based style at the beginning of my project,[81] my subsequent release, *The Duke Beat Tape*, employed a more 'experimental' model of beatmaking, in the sense of the word that indicates experimentation with an unfamiliar musical practice rather than an alignment with a kind of recognisable avant-garde genre.[82] The six tracks of *The Duke Beat Tape* combine looped samples from 'jazz' recordings with drum parts of a trap-informed nature that are comprised of programmed patterns played through a virtual instrument that emulates the TR-808 drum machine. No other sources besides the looping samples and TR-808 patterns were added to any of the tracks, making for a minimal beatmaking scheme that

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[79] Marshall, 'Musically Expressed Ideas about Music'.
[80] The beat tape release format is discussed in depth in Chapter 6.
[81] b-cátt, *A.M. Beat Tape* (Self-released by b-cátt, 2016).
[82] b-cátt, The *Duke Beat Tape* (Self-released by b-cátt, 2017).

aims to draw power from a challenge of musical economy comparable to that of early hip hop style, where because of the basic model of a setup consisting of two turntables, only two sound sources could be made to be audible at once. To expand on the challenge and to realise a consistent sound across the beats, I restricted myself further by only sampling recordings by one artist and from a single resource – performances recorded by Duke Ellington (and various sidemen) obtained from The David W. Niven Collection of Early Jazz Legends, 1921-1991, available online via *Internet Archive*.[83] I regard the beat style that I achieved through the production of *The Duke Beat Tape* as a 'synthesis', the third stage of a dialectical development. Here, the 'thesis' of what I perceive as hip hop's 'second golden age' entails looped 'jazz' instrumental breaks and 'boom bap' style programming of sampled drum hits, and the 'antithesis' entails synthesised grooves punctuated by 'trap' drum patterns, thus my ensuing 'synthesis' can be regarded as 'negating' the synthesised grooves by returning to 'jazz' loops, now paired with TR-808 drums. This exercise demonstrates the vast potential for hybridity to materialise in beatmaking style, mixing existing ideas and technical approaches to harness the counter-fixity existing at hip hop culture's core.

As part of my research into the region-specific beat styles of Houston,[84] I sought a way of using my creative practice activities to better understand how DJ Screw, arguably Texas's most influential underground hip hop DJ, formulated and refined his distinctive musicality, and how his output commands a significant presence on the wider continuum of hip hop. DJ Screw's mixes, over which Houston MCs performed freestyle verses, were the result of a practice that conflated the disciplines of DJing and beatmaking, making for a striking similarity with the musical model of early hip hop culture. To explore this, I produced *B-Boy Screw Tape*, a release that subjects a sustained mix of drum breaks – some classic, some obscure – to digital emulations of 'chopped and screwed' techniques.[85] Through this project, I found that I could lend hard funk breaks a hypnotic quality by introducing stuttering loops-within-loops ('chopping') and slowing them down

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[83] 'The David W. Niven Collection of Early Jazz Legends, 1921-1991', *Internet Archive*, 2013, https://archive.org/details/davidwnivenjazz (31st March, 2017).
[84] My findings on Houston's beat styles are disclosed in Chapter 5.
[85] b-cátt, *B-Boy Screw Tape* (Self-released by b-cátt, 2017).

('screwing'). These musical results led me to think about how my handling of sampling and chopping could be yet more involved, working on a more granular level with regard for my electroacoustic musical priorities. Listening beyond hip hop, among my strongest influences as a beatmaker was the album *Replica* by the electronic producer Oneohtrix Point Never;[86] the tracks of this album are comprised mainly of samples derived from 1980s/1990s television adverts, chopped down to small fragments and looped in bursts in a manner reminiscent of *musique concrète*'s 'closed groove' strategy. Such a treatment of recorded sound might be considered a musical form of collage, which is among the main research interests of my colleague Newcastle-based DJ and producer Rob Blazey. As my research continued, Blazey invited me to participate in his Collage Music Club project, where producers and beatmakers were tasked with making new compositions using only audio sampled from a certain specified track.[87] The two tracks I contributed to this project are featured on my 2019 beat tape release *Hardly Working* alongside other beats produced using highly disparate sources including television infomercials, early jazz recordings (like those used on *Duke Beat Tape*), and more orthodox commercial rock, funk, and jazz records.[88] From here, I was ready to consolidate my musical ideas in my thesis's creative practice element – the beat tape *Hexagrammar* – by expanding the scope of what can be meant by 'sampling' in beatmaking, going beyond the universally acknowledged definition of harnessing sound from existing recordings to incorporate techniques like the ripping and repurposing of digital instrument data from 'retro' video games software.[89]

The idea that music and scholarship about music can be conflated as outlined in this chapter would likely be regarded as radical and unwieldy to some of a more traditional musicological inclination, but I hold that an approach that rejects the pre-eminence of language and notation in favour of a meditation on sound may be the only way to truly

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[86] Oneohtrix Point Never, *Replica* (Software, SFT 010, 2011).
[87] 'collage music club', *SoundCloud*, 2017, https://soundcloud.com/collagemusicclub (31st March, 2017).
[88] b-cátt, *Hardly Working* (Self-released by b-cátt, 2019).
[89] This facet of my engagement with the concept of techno-musicality is discussed in depth in Chapter 4.

get under the hood of contemporary popular music. A justification for this can be found in Thomas's reflections on teaching music at undergraduate level, which attest:

> music *is* philosophy, music *is* politics – not merely reflective of them or related to them. It's all very well for me to stand up and say that, but managing to articulate how philosophical, political or other discourses are *manifest* in how music is made and how it sounds is a lot harder to do than one might at first imagine, especially when trying to convince anyone for whom 'politics' (or any other kind of commentary) in music can only be conceived in terms of lyrics ('message'), or, moreover, anyone who has learnt music according to the Western European, notated frameworks of harmony and counterpoint.[90]

Ultimately, experience is the best teacher, and the lessons learned through involvement in musical practice can aid in discovering the impetus of arts and humanities in the broadest sense. As I investigate disparate styles of hip hop music from different periods and regions, with consideration for the societal factors that shaped them, I carry with me the notion that creative practice and philosophical/political inquiry are not mutually exclusive – consciously or not, creative musicians operate as both products and producers of their situations, and it is this simple dialectical condition that I regard as the principal driver of hip hop music's historical development.

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[90] Gustav Thomas, 'Wild Productivity in the Age of Evaporation: A Brief Outline in Self-Situation', *Claws & Tongues*, 2016, https://clawsandtongues.wordpress.com/2016/11/06/wild-productivity-in-the-age-of-evaporation-a-brief-outline-in-self-situation (31st March, 2017).

Chapter 3 – Dialectics of Hip Hop

Protons Electrons Always Cause Explosions.[1]

Underground Hip Hop and the Culture Industry

I contend that the main driver of hip hop music's development is a dialectical situation involving underground hip hop culture and the corporate culture industry, with other, secondary dialectical situations working in parallel with this relationship. I will begin my analysis by addressing the earliest phase of hip hop's history as an identifiable genre – as John Connell and Chris Gibson suggest, the 'moment of commodification' of a kind of vernacular music can reveal much about the values of the culture as determined by its practitioners.[2] In terms of hip hop, this is a question of 'realness', where 'real' hip hop is thought to belong to the lineage that includes the culture's first DJs who operated in 1970s New York City in an entirely live, 'DIY' setting, without any investment or interference from record companies. This initial period of hip hop music came to an end upon the commercial incursions of labels like Enjoy, Mercury, and perhaps most notoriously, Sugar Hill.

In 1979, Sylvia Robinson, who had previously pursued a career as a singer and songwriter, discovered early hip hop culture by hearing recordings of DJ sets on cassette tapes that were circulating among children.[3] Upon hearing the energetic performances of these sets, Robinson surmised that the musical model of live MCs rhyming over repeating breaks could be reproduced in the studio and moulded into a potential hit single, so she hired Henry Jackson (Big Bank Hank) – a bouncer at a local club that held hip hop parties – to rap on a record, along with two other novice MCs who were friends of her son,

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[1] Genius / GZA, '4th Chamber', *Liquid Swords* (Geffen Records, 1995).
[2] John Connell and Chris Gibson, *Sound Tracks: Popular music, identity and place* (London: Routledge, 2003), 28.
[3] David Toop, *Rap Attack #3* (London: Serpent's Tail, 2000), 80-81.

Michael Wright (Wonder Mike) and Guy O'Brien (Master Gee).[4] Robinson, as CEO of her

newly-founded label Sugar Hill Records, named this group the Sugarhill Gang, and had

them release their first single in September 1979: 'Rapper's Delight'.[5] This record

features interpolations – or 'replayed' versions – of grooves from disco records released

earlier in 1979, performed by the group Positive Force.[6] Most of the track is based on the

main drums and bass groove of 'Good Times' by Chic (a track that had been used as a

break by DJs such as Grandmaster Flash in their South Bronx party sets),[7] and the

intro/intermission part borrows liberally from 'Here Comes That Sound Again' by the

British outfit Love De-Luxe.[8] The record was a resounding success, and took many of hip

hop culture's originators by surprise, as Grandmaster Flash remembers:

> For three years things were going great, then all of a sudden you hear on the radio, 'To the
> hip hop, hippedy hop, you don't stop'. I'm saying to myself, 'I don't know of anybody else
> from here to Queens or Long Island that's doing this. Why don't I know of this group called
> The Sugarhill who? The Sugarhill Gang. They don't know of me and I don't know them […]
> They got a record on the radio and that shit was haunting me because I felt we should have
> been the first to do it. We were the first group to really do this – someone took our shot.[9]

In Flash's view, if anyone was to reap any financial rewards from involvement in hip hop

music, it should have been him and his peers who had helped build the scene from the

ground up, but instead the opportunity was taken by outsiders who were able to move

decisively because of their music business experience and access to resources like session

musicians and studio time. Flash regards 'Rapper's Delight' as a pivotal moment that

provoked all the culture's major players to reconsider their priorities, shifting from

seeking to have the most popular party crew in New York City to trying to release a

record as quickly as possible so that they were not drowned out by the noise being made

by what they considered to be phony groups like the Sugarhill Gang.[10]

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[4] Toop, *Rap Attack #3* , 80-81.
[5] Sugar Hill Records was established as a subsidiary label of Sylvia Robinson and her husband Joe Robinson's
company All Platinum Records, with financial support from Moishe Levy of Roulette Records.
Sugarhill Gang, 'Rapper's Delight', (Sugar Hill Records, 1979).
[6] Tim Lawrence, *Life and Death on the New York Dance Floor, 1980-1983* (Durham, NC: Duke University Press,
2016), 99.
[7] Chic, 'Good Times', (Atlantic, 1979).
Grandmaster Flash & DJ Sinbad, *New York City 1979* (Beat Street Recordings, 1979).
[8] Love De-Luxe With Hawkshaw's Discophonia, 'Here Comes That Sound Again', (Warner Bros. Records, 1979).
[9] Toop, *Rap Attack #3*, 76.
[10] Jim Fricke, Charlie Ahearn, and Nelson George, *Yes, Yes, Y'all: The Experience Music Project Oral History of
Hip Hop's First Decade* (Boston, MA: Da Capo Press, 2002), 196.

Another veteran of the music industry, Bobby Robinson (no relation to Sylvia Robinson) was quick to act after the success of Sugar Hill's inaugural enterprise, setting about executing plans of his own. Robinson identified a similarity between the nascent hip hop style and doo wop as forms of 'black teenage ghetto expression',[11] so hip hop's cultural roots – the exercising of improvisatory street level resourcefulness in the face of poverty and urban decay – were not lost on him. Nevertheless, he sought to profit from it rather than work with the young DJs and MCs on their terms, and helped his nephew Gabriel Jackson, known as the MC Spoonie Gee, become a recording rap artist. Spoonie Gee's first single 'Spoonin Rap' (on which he is credited as 'Spoonin Gee'), while arguably not as radio-friendly as 'Rapper's Delight', is a shrewder effort for its incorporation of dub-like reverb effects and Sponnie Gee's easy, seemingly endless flows;[12] both elements are indicative of an approach that is more faithful to the original party-based hip hop sound for their nods towards Jamaican music. Where Sugar Hill had managed to appropriate and capitalise on the general *idea* of rap as a type of music, Bobby Robinson's Spoonie Gee, as well as Funky Four Plus One More who released their single 'Rappin and Rocking the House' soon after,[13] invoked more of the *style* for commercial ends, thus elevating the artistic standard that the subsequent rap records had to meet. On top of this, and likely in response to the criticisms of those who had been involved in hip hop throughout the mid-to-late 1970s, record labels decided that rather than manufacturing their own groups, it was more prudent to sign real live hip hop crews as recording artists in order to present more credible products featuring the very same voices that had been heard at block parties and on bootleg cassettes. This was the principal concept that steered a second wave of hip hop records as the 1980s began.

Among the first live party MCs to cross over into making records was Kurtis Blow, who had a minor hit with the Christmas novelty single 'Christmas Rappin' released by Mercury Records in December 1979 only weeks after the success of 'Rapper's Delight'.[14] Mercury's record served as an experiment to gauge the public's appetite for rap music, and to see if

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[11] Toop, *Rap Attack #3*, 84-85.
[12] Spoonin Gee, 'Spoonin Rap', (Sound Of New York, USA, QC 708, 1979).
[13] Funky Four Plus One More, 'Rappin and Rocking the House', (Enjoy Records, 1979).
[14] Kurtis Blow, 'Christmas Rappin' (Mercury, 1979).

Blow could be a viable recording artist. Evidently, the results were favourable, and Blow went on to record 'The Breaks' for Mercury in 1980.[15] The track's title is ironic for while surely it references the use of looping 'breaks' played on turntables in the original live hip hop DJ sets and features one of the underground culture's familiar MCs on the microphone, like all of the other rap records of the time it does not make use of a break from a record at all. Moreover, 'The Breaks' doesn't even feature an interpolation of an existing break like 'Rapper's Delight' does with its take on 'Good Times'; the groove is an entirely original composition, demonstrating how labels no longer felt that rap music had to be derivative in any way (besides adopting the idea of rapping to a groove being a workable musical practice on its own). Due to the polished recording, the use of live musicians, and the relatively rigid nature of the lyrics (written as a fixed song, contrasting with the improvised party rhymes that Blow was known for previously), 'The Breaks' resembles a disco track of the kind that would be manipulated and blasted through sound systems by 1970s hip hop DJs, but it does not resemble a 1970s hip hop performance in and of itself. As a result, what is lacking on the record is hardness – the raw, volatile sonic force that made hip hop so exciting to the youth of the South Bronx. This hardness would eventually find its way into recorded hip hop, but not before another respected name in early hip hop was tapped by a record label.

After landing a marquee signing with Grandmaster Flash and his group the Furious Five, Sugar Hill released 'The Message', a record that went further than 'The Breaks' in disregarding the original hip hop style's derivative musical strategies by not only being a composition comprised entirely of original elements, but one that bore no resemblance to disco or hard funk music, instead offering synthesised riffs playing over a slow and mechanical-sounding electronic drum beat.[16] This track is effectively a collaboration between the Furious Five's MC Melle Mel – who like Kurtis Blow, had gained considerable experience as a live party MC – and rapper Duke Bootee. None of the other Furious Five MCs, or Grandmaster Flash himself, appear on the record at all. This release

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[15] Kurtis Blow, 'The Breaks' (Mercury, 1980).
[16] Grand Master Flash & The Furious Five Feat.: Melle Mel & Duke Bootee, 'The Message' (Sugar Hill Records, 1982).

frustrated Flash, as his name was used to sell records without him, or his crew (excepting Melle Mel), having any creative input.[17] Flash's relationship with Sylvia Robinson deteriorated further when he became dissatisfied with the way she controlled the group's release schedule – his group was not allowed to cut as many records as he wanted, and this led to him wishing to withdraw from the label's roster.[18] As Flash recalls in his autobiography, this created a rift within the Furious Five group, as some members were happy with Robinson's involvement:

> Sylvia's been feeding 'em some kind of trickle-down garbage about how if we don't stay hot, the train doesn't leave the station. But what they don't understand is that she's eating cake and we're crumb-snatching.[19]

Here, the antagonism between early hip hop culture and the music industry lies in plain sight. Flash's invoking of the term 'trickle-down' is significant, as he uses it to express his disdain for an enterprise that yielded power and influence to generate considerable profit for the most privileged and monied parties involved, while giving relatively small rewards to those whose work and subcultural status were being exploited to prevent them from upsetting the model. This conflict, reminiscent of the concern that lies at the heart of Marxism, is key to my understanding of how hip hop styles have emerged from the underground, been recuperated, and then later been reconfigured and modified in new spaces of the underground.

As the first hip hop records were coming out, Afrika Bambaataa and his Zulu Nation group continued to focus on playing live events in New York City, and were wary of labels like Sugar Hill, as Bambaataa reflects:

> When we started seeing the recordings, a lot of us in the Zulu Nation stayed away from all that at first because people thought once it got into vinyl it was going to kill the culture. We waited on the line just to see where everybody was going because we started hearing that a lot of people was getting robbed; they wasn't getting paid for this and that, and certain record companies would keep you away from knowing about how many records you were selling.[20]

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[17] Grandmaster Flash and David Ritz, *The Adventures of Grandmaster Flash* (New York, NY: Broadway Books, 2008), 158.
[18] Ibid., 151.
[19] Ibid., 175.
[20] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 196.

Although many like Bambaataa and Flash saw hip hop's transformation into a form of recorded popular music as damaging to the culture they started, others have since reflected on it more positively; Sha-Rock, formerly of the group Funky Four Plus One More, considers:

> Putting it on vinyl did change things a lot, and I think it changed it for the best. What recording did was open it up. A lot of people that didn't have the opportunity to listen to it in New York when it first started could now see that it was something good. This is a part of history. So I think it was for the best.[21]

Throughout my research I have found that as hip hop was able to be heard by more and more people due to the distribution of records, hip hop style has mutated and split into several different region-specific sounds. In short, the industry's history is marked with examples of exploitation, but it has also provoked and facilitated new strains of hip hop music by new artists, with their own approaches to beatmaking. Inevitably, like the earliest hip hop singles, records from these novel subgenres have been coveted by consumers who do not necessarily have a connection with hip hop culture beyond simply being a fan of the music. This is comparable to the commercialisation of an older form of black American music, jazz, as Amiri Baraka argues:

> The Jazz Age can also be called the age of *recorded* blues and jazz because it was in the twenties that the great masses of jazz and blues material began to be recorded, and not only were the race records sold in great numbers but Americans began to realize for the first time that there was a *native* American music as traditionally wild, happy, disenchanted, and unfettered as it had become fashionable for them to think they themselves had become.[22]

Like hip hop, blues and jazz existed as live, vernacular musics before they were recorded and committed to vinyl; the music industry, operating as an arm of the capitalist culture industry, determines that a musical paradigm has truly come of age when it becomes eminently profitable. From this moment, a feedback loop of the culture industry drawing from the underground – and vice-versa – is established.

For the music industry to recalibrate the form of a vernacular musical culture as a commercially-viable genre is to privilege the domain of capital over the prospect for

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[21] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 196.
[22] Amiri Baraka, *Blues People* (Edinburgh: Payback Press, 1995), 100.

ordinary people to empower themselves through means of expression that are carried by their own creative agencies. In the context of neoliberalism, the music industry's commercial enterprises in popular music serve to protect the supremacy of capitalism. This results in an insistence on professionalism through standardisation as identified by Gustav Thomas, who notes:

> By turning music into a professionalist specialism, on the one hand, and the ultimate in fetishized commodity on the other, we not only strand vast sections of the population outside infrastructures of power and entitlement, by cutting off […] their most effective channels to agency and self-determination; we also manage to reinforce people's sense that they are powerless to overturn the grim conditions they find themselves living in – meaning they're easy to mobilize by lying to them about both the causes of, and projected solutions to, their ills.[23]

The music industry thus supports the neoliberal project, manoeuvring to inhibit the scope of ordinary people to become both the producers and consumers of their culture simultaneously. Conversely, in underground scenes, this distinction may not be discernible. In the case of hip hop, the ad hoc party settings of the South Bronx in the 1970s saw the area's marginalised youth transcend the degradation of their environment that had resulted from the institutionally-sanctioned 'benign neglect' policy;[24] when the first hip hop records started to come out at the end of the decade, it was the culture industry reasserting its power in a campaign of recuperation. As Adam Krims puts it: 'A careful reading of the rap industry might suggest the pliability of capital and the extent to which a politically engaged culture such as hip-hop can most easily be put to the service of dominant ideologies'.[25] This is a crucial point, but it is also important to maintain that hip hop can – and should – be considered a music of a radical persuasion at its core. Just because the culture industry has instigated recuperations of hip hop culture does not mean that hip hop is now solely an instrument of capital which does not allow for new underground scenes to emerge and develop. Underground hip hop is perennially

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[23] Gustav Thomas, 'The Impossible Vs. the Unthinkable: A Sequel to 'Wild Productivity in the Age of Evaporation'', *Claws & Tongues*, 2016, https://clawsandtongues.wordpress.com/2016/11/09/the-impossible-vs-the-unthinkable-a-sequel-to-wild-productivity-in-the-age-of-evaporation (31st March, 2017).

[24] 'Benign neglect' was a term coined by Daniel Patrick Moynihan who served as President Richard Nixon's Urban Affairs Advisor in 1969. It referred to a program of municipal disinvestment in predominantly black neighbourhoods of New York City.
Peter Kihss, ''Benign Neglect' on Race Is Proposed by Moynihan', *The New York Times*, 1970, https://www.nytimes.com/1970/03/01/archives/benign-neglect-on-race-is-proposed-by-moynihan-moynihan-urges.html (5th March, 2019).

[25] Adam Krims, *Rap Music and the Poetics of Identity* (Cambridge: Cambridge University Press, 2000), 1.

displaced, hunted by the music industry soon after it settles somewhere new, but I argue that it thrives on this displacement. The continued existence of both underground hip hop and commercial hip hop can be attributed to the latter's condition of what Andrew Leyshon, David Matless, and George Revill call 'limited voraciousness', where: 'the spaces of emerging new musics can be monitored and tapped yet not stifled'.[26] The culture industry is willing and able to appropriate forms of underground culture when they become consistent aesthetically, but no sooner. Furthermore, after small independent labels are established that work closely with or even within an underground scene to release examples of cutting-edge styles of musics, evidencing greater creative freedom than more commercial releases of a same or similar genre, these labels can be bought by larger companies. Leyshon, Matless, and Revill find that: 'The result is a complex industrial structure in which the big corporations are like mother ships served by smaller craft designed by specialized missions'.[27] Thus, the culture industry is always primed to capitalise on grassroots musical trends that show the most commercial promise, taking agency away from those who started the underground scene in the process.

I acquire the term 'culture industry' from Theodor Adorno and Max Horkheimer's *Dialectic of Enlightenment*, in which they outline how the dominant capitalist power structure invests itself in mass culture and associated technologies to prolong its control over capital.[28] Regarding the film and radio industries of their time, Adorno and Horkheimer argue: 'when their directors' incomes are published, any doubt about the social utility of the finished products is removed'.[29] Artistic merit is, according to the authors, not a priority of the culture industry. The culture industry, does, however, co-opt creative ideas from more socially-driven cultural scenes as novel selling points to

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[26] Andrew Leyshon, David Matless, and George Revill, 'Introduction: Music, Space, and the Production of Place' in Leyshon, Andrew, Matless, David & Revill, George, (eds.), *The Place of Music* (New York: The Guilford Press, 1998), 1-30 (10).

[27] Ibid., 37.

[28] By using this term, I acknowledge but also put aside Adorno's well-documented disdain of popular music (including black American music). As Robert W. Witkin points out, Adorno viewed all forms of popular music as symptomatic of a malignant cultural standardisation; in his analysis, he was not prepared to distinguish between, say, commercial recorded jazz music and the more exploratory bebop scene.
Robert W. Witkin, *Adorno on Popular Culture* (London: Routledge, 2003), 98-99.

[29] Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment* (London: Verso, 1997), 121.

meet the casual consumer's demand for, to use hip hop parlance, the 'real'. As Adorno and Horkheimer elaborate on this reification of cultural materials:

> This provides the tragic substance which pure amusement cannot itself supply, but which it needs if it is somehow to remain faithful to the principle of the exact reproduction of phenomena [...] It is a safeguard against the reproach that truth is not respected, whereas it is really being adopted with cynical regret. To the consumer who – culturally – has seen better days it offers a substitute for long-discarded profundities.[30]

Adorno and Horkheimer find that through standardisation, the culture industry absorbs a wide variety of vernacular culture's tropes and styles to make for a diversity of products:

> Marked differentiations such as A and B films, or of stories in magazines in different price ranges, depend not so much on subject matter as on classifying, organizing, and labelling consumers. Something is provided for all so that none may escape; the distinctions are emphasized and extended.[31]

This strategy, dubbed the 'technological rationale' by Adorno and Horkheimer,[32] sees the ideological model of homogeneity in private ownership propped up by the recuperation of diverse styles formalised into categories, and is made possible by the culture industry's exercising of its technological monopoly, which includes professional studio spaces and equipment, record manufacturing facilities, and commercial radio broadcasting. These devices, Adorno and Horkheimer argue, work to fix and thus professionalise previously unfixed expressions of vernacular culture, and also incorporate its audience into this system, sustaining a cycle of both serving and dictating the public's tastes.[33] Looking at the bigger picture, Adorno and Horkheimer observe the connections between media/entertainment companies and banks to demonstrate how the culture industry is dependent on – and a tool of – capitalist hegemony in general.[34] This connectedness ensures that the culture industry continues to impose on the public its tacit message that those who do not resist capitalism and strive to enjoy power under it are the only ones who can attain meaningful success and be trusted to manage the apparatus of the developed world even-handedly, despite historical evidence to the contrary.

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[30] Adorno and Horkheimer, *Dialectic of Enlightenment*, 151.
[31] Ibid., 123.
[32] Ibid., 121.
[33] Ibid., 122.
[34] Ibid., 123.

To probe the character of the culture industry further with a view to understanding how it serves the dominant culture in a more contemporary setting than Adorno's, I turn to John Fiske, who has written extensively about power relations in popular culture. Clarifying the roles of those involved in the culture industry, Fiske regards jeans as an item of clothing that came to prominence through popular culture:

> The producers and distributors of jeans do not *intend* to promote capitalist ideology with their product: they are not deliberate propagandists. Rather, the economic system, which determines mass production and mass consumption, reproduces itself ideologically in its commodities. Every commodity reproduces the ideology of the system that produced it: a commodity is ideology made material.[35]

In the context of the culture industry's recuperation of hip hop music, the agents that execute this recuperation (Sugar Hill Records, for example) are not necessarily the wealthiest, most powerful arch-capitalists of the world, but they work to prop up capitalism nonetheless. Fiske clarifies the status of those who support the culture industry by invoking Stuart Hall's term 'power-bloc', which, Fiske notes:

> is not a social class, nor even a category of people. It is a disposition and exercise of power to which certain social formations, defined primarily by class, race, gender and ethnicity, have privileged access and they can readily turn to their own economic and political interests.[36]

The agents of the culture industry do not therefore constitute a discernible, essentialised class, but act in a manner that embodies capitalism's privatisation of wealth and defence of privilege. The culture industry normalises the idea of capitalist domination by leveraging its resources to convince the public at large that there can be no alternative. As M. Gottdiener puts it:

> The capitalist class not only controls the production of mass culture in order to accumulate wealth, it also, by dominating the belief system(s) of the working class, reproduces its rule. In particular, according to hegemony theory, the abilities of the working class to think reflexively and to analyze the social and individual conditions of everyday life have been short-circuited by this consciousness industry [...] Consequently, cultural hegemony is one of the reasons that the working class does not revolt against the conditions of its own oppression.[37]

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[35] John Fiske, *Understanding Popular Culture* (Abingdon: Routledge, 2010), 10.
[36] John Fiske, *Power Plays, Power Works* (London: Verso, 1993), 10.
[37] M. Gottdiener, 'Hegemony and Mass Culture: A Semiotic Approach', *American Journal of Sociology*, 90/5 (Mar., 1985), 979-1001 (982).

To this end, the culture industry appropriates vernacular culture in a process that Fiske calls 'incorporation', which: 'robs subordinate groups of any oppositional language they may produce: it deprives them of the means to speak their opposition and thus, ultimately, of their opposition itself'.[38] Fiske elaborates that this process is done in a measured way as 'a form of containment',[39] where the culture industry adopts and ostensibly celebrates underground styles to make itself appear to be tolerant of dissent towards capitalism, sustaining the illusion that it is benevolent and magnanimous in the face of attacks from the unsophisticated (albeit vibrant and talented) agents of vernacular culture to sustain its supremacy. The opposite of incorporation is 'excorporation', which Fiske describes as:

> the process by which the subordinate make their own culture out of the resources and commodities provided by the dominant system, and this is central to popular culture, for in an industrial society the only resources from which the subordinate can make their own subcultures are those provided by the system that subordinates them. There is no "authentic" folk culture to provide an alternative, and so popular culture is necessarily the art of making do with what is available.[40]

Excorporation is exemplified by early hip hop, where vinyl records were the 'resources and commodities' that were repurposed by the marginalised people of the South Bronx to make a new culture. With this, we can posit that the relationship between underground hip hop and the culture industry did not begin with Sugar Hill's incorporation of the work of DJs like Grandmaster Flash, but the DJs' earlier excorporation of the record industry's artifacts, and additionally, those artifacts were the material results of incorporations of previous unfixed black American musical expressions. I consider the processes of incorporation and excorporation to be aligned with the similarly opposing concepts of 'fluidity' and 'fixity' as identified by Connell and Gibson.[41] In terms of the spaces in which music can be experienced, an example of fluidity would be a rave of dubious legality happening in a field outside of a city – an ephemeral setting that evidences the furtive resourcefulness of participants in underground musical cultures, and an example of fixity would be a licensed nightclub with a door charge and a security presence – a fixed venue where once-underground

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[38] Fiske, *Understanding Popular Culture*, 13.
[39] Ibid., 13-16.
[40] Ibid., 13.
[41] Connell and Gibson, *Sound Tracks*, 10.

musical paradigms have been effectively institutionalised for a chiefly commercial enterprise.[42] This distinction highlights how broader sociocultural factors relate to musical cultures, setting the scene for the ongoing tug of war between underground culture and the culture industry. Another duality presented by Fiske is that of 'imperializing' versus 'localizing' power, where the former, as exercised by the power-bloc, sets out to dominate: 'over physical reality, over human societies, over history, over consciousness', whereas the latter is to do with ordinary people trying to retain control over the immediate conditions that they live in.[43] Fiske's imperializing power functions by the maintenance of 'structures' – manifestations of rigid conventions that reflect how the power-bloc retains its dominance, and these structures are countered by 'practices' performed by those who are not privileged by capitalism to learn to survive imperializing power's worst consequences.[44] Meaningful opposition to the dominance of capitalism in the modern Western world beyond the defensive measures of such practices is significantly harder to find, despite Marxism's undeniable presence in the social sciences. Fiske suggests:

> Marxism's failure to establish itself as a broadly popular movement in most Western capitalist nations, and in the United States in particular, may be due in some large measure to the gap between its denial of the individual as a site of authentic experience and the sense of most people that what happens to them and how they think as *individuals* are matters of crucial importance.[45]

Hence, an adjustment of Marxism's practical application may be necessary if it is to combat neoliberalism. Considering hip hop, how could a black American cultural form that is spurred by individual improvisatory impulses possibly exist if it is pinned down by a contrived, dogmatic insistence on collectivity stemming from European developments in history? I will attempt to answer this question as I address the impetus of the black radical tradition.

Attempts have been made to present racist subjugation in America as an ill that can be confronted with a Marxist outlook. The black American scholar Manning Marable coined

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[42] Connell and Gibson, *Sound Tracks*, 205.
[43] Fiske, *Power Plays, Power Works*, 11-12.
[44] Ibid., 33.
[45] Ibid., 67.

the term 'underdevelopment' to describe the affronts of Western powers against non-white populations through slavery, political destabilisation, and occupation, while evidencing an 'economic amnesia' that comprises a refusal to acknowledge the institutional violence that they leveraged to gain their advantaged positions.[46] Marable reflects:

> Since the demise of slavery, and the emergence of modern capitalism, the process of Black underdevelopment has expanded and deepened. To understand this dynamic of degradation, first, is to recognize that development itself is comparative in essence, a relationship of inequality between the capitalist ruling class and those who are exploited. Underdevelopment is not the absence of development; it is the inevitable product of an oppressed population's integration into the world market economy and political system.[47]

Rather than being estranged from the system of capitalism, black Americans have been integrated into it, albeit on unfavourable terms, as we have seen in hip hop culture's transition into a genre of commercial, recorded music. The relationship between underground hip hop and the culture industry that became apparent during this transition resembles what Marable calls the 'organic process' of history,[48] that is, the process of historical materialism – or dialectical materialism – that underpins Marxist thought. Indeed, according to Marable: 'Nothing in Black history, American history, or world history has ever been predetermined by a single factor or force'.[49] This idea that history does not advance by the acts of a single group of agents (bound by a single ideological inclination or allegiance) but by two groups in conflict is the pillar of my research's theoretical framework.

Idealism and Materialism

The elemental power that generates dialectics as devised by G. W. F. Hegel is that of negation. As Andy Blunden explains in his foreword to Hegel's 'shorter' *Logic*, Hegel's conception of dialectics entails a 'sceptical critique [which] undermines and destroys the given shape of consciousness, by showing it to be self-destructive', meaning that a

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[46] Manning Marable, *How Capitalism Underdeveloped Black America: Problems in Race, Political Economy, and Society* (Boston, MA: South End Press, 1983), 3.
[47] Ibid., 7.
[48] Ibid., 261.
[49] Ibid.

proposition is absorbed and then denied (negated) by that which opposes it, thus creating a new, albeit derivative proposition that 'constitutes the truth of what had gone before'.[50] The potential of dialectics is expounded at length and championed by Trinidadian historian C. L. R. James, who finds that:

> Dialectical logic is the science of tracing by what laws, in what way, notions, our concepts of things, change, to know that they change, to know how they change, constantly to examine these changes.[51]

This digest of this system emphasises the changes that occur in objects and in the mind's conceptions of these objects – separate, yet connected by the process of thought – which are made possible by negation. A kind of 'leap', to invoke James's language,[52] as the onset of a 'synthesis' stage when a negation takes place is discernible in the musical manifestations of hip hop aesthetics, as flows are subject to a sudden ruptures which in turn instigate new flows. This can be heard on El-P's 2007 track 'Run the Numbers', which for much of its duration consists of a polyrhythmic groove featuring crisp, detached, drum sounds playing over layers of clashing textural samples, but at 1:48, a sample taken from the spoken passage 'Queen Of The Crime Council' on the soundtrack to the movie *Kill Bill Vol. 1* is introduced by way of scratches that cut up and stutter the phrase 'Now's the fucking time!' – this serves as a cadential device, negating the density of the mix and prompting a new groove from 1:59.[53] This new groove assumes the same detached sounds as its predecessor, but establishes a blunter, more direct relationship between the drum part and bass part that sees them play directly on top of each other's accents. The development of the track's beat, where a new musical proposition absorbs the pace and sonic materials of an old one to produce a contrasting musical idea, can be understood as a dialectical process for its evolution based on a unity/succession of opposites in a 'knot', as delineated by James's reading of Hegel:

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[50] G. W. F. Hegel and Andy Blunden, *Hegel's Logic*, trans. by William Wallace (Pacifica, CA: Marxists Internet Archive, 2009), 32.

[51] C. L. R. James, *Notes on Dialectics* (Westport, CT: Lawrence Hill & Co., 1981), 55.

[52] Ibid., 100-101.

[53] El-P, 'Run the Numbers', *I'll Sleep When You're Dead* (Definitive Jux, DJX137cd, 2007).
Lucy Liu and Julie Dreyfus, 'Queen Of The Crime Council', *Kill Bill Vol. 1 (Original Soundtrack)* (Maverick, 9362-48570-2, 2003).

the knot consists of two antagonistic elements locked together in a unity. But it cannot remain as such [...] there are further impulses, instinctive actions, spontaneous movements, the emergence of personalities, calculable activities whereupon another knot is formed.[54]

In dialectics, this is a cyclical process that allows for continued development of a concept; to grasp this properly requires a refusal of fixity and an acceptance of change as natural and inevitable.

The concept which a dialectical process advances towards is identified by Hegel as 'the Absolute Idea' – a hypothetical (and therefore abstract) ideal that can be considered a 'signpost' for the dialectical logic of reason to refer to.[55] To apply this to hip hop music, the absolute idea of hip hop can be found in the concept of 'real hip hop', the intangible hallmark that those who identify as having a strong connection with hip hop culture might bestow upon examples of hip hop music that exhibit the sonic hardness and musical manifestations of signifyin(g) that come with an observance and emulation of early hip hop's character. Hegel dubs the process of working towards the absolute idea 'essence', entailing a continuing search for, as Blunden describes, 'what is behind appearance'.[56] This is significant for my theoretical framework because it embodies a strikingly similar idea to that of the phenomenological *epoché*, the intensive probing of an object's most essential characteristics by gradually stripping away all that is peripheral. An essence can thus be sought in a study of a musical example at a micro level through music analysis, and a study of a musical culture at a macro level through a historical analysis – these two levels of detail are intimately related in a style with such a transparent emphasis on its technologies, histories, and geographies like hip hop. With this application of dialectics to music instigated, however, an enquiry that is rooted in idealism in line with Hegel's original conceptions is likely to prove insufficient.

Acknowledging that Karl Marx's theories were formulated through an application of Hegel's basic model of dialectics, James notes:

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[54] James, *Notes on Dialectics*, 9.
[55] Hegel and Blunden, *Hegel's Logic*, 46.
[56] Ibid., 42.

> Dialectic for Hegel was a strictly scientific method. He might speak of inevitable laws, but he insists from the beginning that the proof of dialectic as scientific method is that the laws prove their correspondence with reality. Marx's dialectic is of the same character.[57]

Though seemingly existing solely in the realm of human imagination, the results of dialectical processes become evident when one examines a development of history – this is the premise of materialism.

Marx's preference for a materialistic outlook stems from his view that the nature of humanity can be found and understood by what – and how – people produce while recognising a link between mental and material production.[58] Crucially, people can only produce using the materials they have available to them at a given time, so any kind of creation is necessarily derivative and subject to real, concrete conditions. Thus, Marx and Frederick Engels articulate the distinction between idealism and materialism with the claim that:

> In direct contrast to German philosophy [comprising Hegel's model of dialectics] which descends from heaven to earth, here we ascend from earth to heaven. That is to say, we do not set out from what men say, imagine, conceive, nor from men as narrated, thought of, imagined, conceived, in order to arrive at men in the flesh. We set out from real, active men, and on the basis of their real life-process we demonstrate the development of the ideological reflexes and echoes of this life-process.[59]

With this concept, human agency conflates production and consumption;[60] to consider the production of hip hop as a genre of recorded music, the culture industry produces musical products by consuming tropes incubated in underground scenes, and underground scenes consume both the technological devices of the culture industry (i.e. signifyin(g) on objects like turntables) and the commercial machinations of the record business to distribute its own independent output. The culture industry and underground culture exist in a dialectical feedback loop, demonstrating what Marx describes as 'mutual dependence', the pivot of political economy.[61] Related to this is Marx's concept of alienation, which is to do with the dominant culture profiting from the labour of the

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[57] C. L. R. James, 'Dialectical Materialism and the Fate of Humanity', *Marxists Internet Archive*, 1947, https://www.marxists.org/archive/james-clr/works/diamat/diamat47.htm (31st March, 2017).
[58] Marx and Engels, *The German Ideology*, 47.
[59] Ibid.
[60] Ibid., 131.
[61] Ibid., 133.

proletariat, depriving proletarians of their time and energy through work: 'The worker therefore only feels himself outside his work, and in his work feels outside himself'.[62] Through the commercialisation and thus professionalisation of hip hop music, the practitioners of hip hop's underground scenes have found themselves alienated from their own site of culture and leisure – the very means by which they sought to enrich their lives using their own creative faculties. In a bid to help the proletariat to become conscious of its alienation with a view to combating it, Marx proposes a dialectical opposition between wealth and proletariat, where wealth is: 'compelled to maintain *itself* and thereby its opposite, the proletariat, in *existence*', that is, the *positive* of wealth defending its rule over the proletariat, whereas the proletariat, in contrast, wields a *negative* power which aims to neutralise the exploitative power relation through the termination of private property – the positive fixity of wealth versus the negative counter-fixity of the proletariat.[63] This dynamism, along with its parallels in culture that I will identify in this thesis, spurs the development of history as the culture industry (on behalf of capitalist hegemony) and underground culture (assumed to be intrinsically anti-capitalist in nature) consume/produce in an ongoing struggle against each other.

Dialectical reason does not merely observe oppositions, it brings them together and resolves them by way of negation. James notes:

> The negativity of the free creative activity of the proletariat can only come completely into play when it is in contradiction with a concrete obstacle, something which, to release its own nature, it must overcome.[64]

This 'free creative activity' is most meaningful and useful when it confronts its antagonist directly, absorbing it with the aim of neutralising it rather than trying to reach a compromise with it; this can be seen in hip hop culture's (mis)uses of the culture industry's technologies to sustain socially-driven, non-commercial scenes. Echoing Marx's opposition to the continued existence of the power structure that props up the ruling

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[62] Karl Marx, *Economic and Philosophic Manuscripts of 1844*, ed. and trans. by Martin Milligan, (Mineola, NY: Dover Publications, 2007), 72.
[63] Karl Marx and Frederick Engels, *The Holy Family or Critique of Critical Critique*, trans. by R. Dixon, (Moscow: Foreign Languages Publishing House, 1956), 51.
[64] James, *Notes on Dialectics*, 91.

class, James argues that the goal of the proletariat is to 'abolish organization', and this can only be done through organization's negative – spontaneity.[65] To act spontaneously is to tap into the essence of counter-fixity; the material results of this activity always already exist, latent in fixed objects, but 'leap' out when an individual or group eschews the codes of a system. For example, bebop musicians played instruments designed to respect a standardised system of twelve fixed pitches repeating across octaves, but through improvisatory impulses based on playful versioning, extended techniques, and exploratory reharmonisations, these musicians signified on Western common practice's rudiments to make for radical creative developments. However, eventually these developments – as they become synonymous with an underground scene that has reached a certain degree of popularity – are detected by the record industry, which manoeuvres to commodify and therefore fix them. Marx and Engels describe:

> various conditions, which appear first as conditions of self-activity, later as fetters upon it, form in the whole evolution of history a coherent series of forms of intercourse, the coherence of which consists in this: in the place of an earlier form of intercourse, which has become a fetter, a new one is put, corresponding to the more developed productive forces and, hence, to the advanced mode of the self-activity of individuals.[66]

Thus, dialectical development constitutes a cycle/cipher – as such, hip hop can be understood as a truly *living* music for the way in which it continues to demonstrate counter-fixity in its copious stylistic evolutions on the back of the record industry's incursions, made possible through signifyin(g) on new technologies and expanding hip hop's internal epistemology. According to James, Marx's reformulation of dialectics shifted it from operating as a 'perpetual quest for universality as necessarily confined to the process of knowledge' to a 'quest for universality in the need for the free and full development of all the inherent and acquired characteristics of the individual in productive and intellectual labour' – collective democracy as opposed to individualistic intellectualism.[67] This transformation evidences a dialectical recuperation of Hegel's dialectic itself. In my study of hip hop beatmaking's evolution, I aim to use an application of dialectics that is yet more advanced, coloured by the practical political ramifications of the black radical tradition.

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[65] James, *Notes on Dialectics*, 117.
[66] Marx and Engels, *The German Ideology*, 87.
[67] C. L. R. James, 'Dialectical Materialism and the Fate of Humanity'.

The Black Radical Tradition

To James, Marxism and black radicalism share the same goal of ending global capitalism and imperialism, thus in spite of their supposed ideological divergences on the practical idea of nationalism, they are compatible, even allied. In an extended critique of James's application of dialectics, John H. McClendon III argues:

> James finds Pan-Africanism and Marxism-Leninism compatible […] because for James Pan-Africanism is neither an ideology/theory nor a philosophy. Instead it is a historic movement, a struggle for people with practical political objectives in their fight against imperialism. James believes Pan-Africanism is a *practice* and not a *theory/ideology*. The compatibility factor is due to the fact that Marxism-Leninism serves as his ideology, theory, and philosophy.[68]

As such, the theories of Marxism and the practices of black radicalism co-exist in a dialectical bond, resulting in a position that could be termed Black Marxism.[69] Evidencing his harnessing of dialectics, James's *Notes on Dialectics* demonstrates how the history of socialism should not be analysed by regarding it as a 'fixed object', but as something that has embodied counter-fixity to evolve, adapting to the changing of history. Regarding this condition of counter-fixity, James posits:

> one of the chief errors of thought is to continue to think in one set of forms, categories, ideas, etc., when the object, the content, has moved on, has created or laid the premises for an extension, a development of thought.[70]

Hence, it is wrong to assume that the status of an object at a particular moment designates the limits of the forms that the object's subsequent manifestations can take. In this study of hip hop beatmaking, it would not be helpful to regard purely sample-based production as the pinnacle of what hip hop music can entail before it stops being hip hop, just as it would not be helpful to claim that the only 'real' hip hop was that which comprised the live sets of the Bronx before the release of 'Rapper's Delight'. In making a point of trying to unfix culture's artificial finite categories through dialectical thinking, James sees a constructive way forward for humanity. In my view, the whole point of James's work on dialectics is that critical thought can be pursued by *anyone* with

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[68] John H. McClendon III, *C.L.R. James's Notes on Dialectics: Left Hegelianism or Marxism-Leninism?* (Lanham, MD: Lexington Books, 2005), 13.
[69] Ibid., 16-17.
[70] James, *Notes on Dialectics*, 15.

a view to building a springboard from which one can leap into action on their own power towards their freedom.

Cedric J. Robinson finds that through an immersion in British culture – particularly literature and sport – and his experiences of living in both a colonised land and as a person of colour in Britain, James, as a polemicist and historian, was able to think beyond the economistic rationale of formalised Marxism.[71] James's involvement in cricket, for instance, gave him an insight into how the game was made by and for working class people, but found itself appropriated by the wealthy – an antithesis instigated by the British ruling class.[72] Such theft of products and agencies of marginalised peoples was committed in order to protect hegemony by making the apparatus of the British establishment appear to be cultured and benevolent rather than violent and tyrannical. The culture industry's appropriation of hip hop culture can be considered a similar enterprise. James's research activities, including his comprehensive history of the Haitian Revolution, evidenced his preference for a black radicalism that was profoundly anti-imperialist in character, favouring the idea of marginalised peoples having the capacity to organise and liberate themselves from subjugation as opposed to relying on established party leadership.[73] This position rejects 20th century European communist thought's assumption that an individual's exercising of their own agency is bourgeois, and instead, advocates for the self-empowerment of subjugated black people. Fred Moten states:

> One of the implications of blackness […] is that those manifestations of the future in the degraded present that C.L.R. James described can never be understood simply as illusory. The knowledge of the future in the present is bound up with what is given in something Marx could only subjunctively imagine: the commodity who speaks.[74]

Through the evil of slavery, black people were forced to become such speaking commodities, and in the capitalist music industry, young black musicians have had their cultural capital tapped by record companies for the production of commercial records; in

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[71] Cedric J. Robinson, *Black Marxism: The Making of the Black Radical Tradition* (Chapel Hill, NC: University of North Carolina Press, 2000), 265.
[72] Ibid., 266-267.
[73] Ibid., 275-276.
[74] Fred Moten, *In the Break: The Aesthetics of the Black Radical Tradition* (Minnesota, MN: University of Minnesota Press, 2003), 8.

the black radical tradition that C.L.R. James belongs to, I have found a potent critique of these exploitative tendencies.

Robinson regards formalised Marxism as a body of theory that, despite its overt opposition to capitalism, is ill-equipped to dismantle it due to a preoccupation with the political and economic dynamics happening within Europe, failing to account for the system of slavery that existed beyond Europe even while it was established and maintained by European capitalists.[75] While Marx noted that capitalism was heavily dependent on slave labour, he neglected to consider the humanities – the 'critical mixes and admixtures of language and thought, of cosmology and metaphysics, of habits and morality' – of the displaced Africans who endured the abject horror of the Middle Passage.[76] Identifying this ignorance of systematic racist violence and exploitation, Robinson proposes the idea that Marxism's model of historical materialism would itself become subject to a dialectical process of criticism in order to expose its deficiencies as a Eurocentric ideology that cannot meaningfully combat the global blights of capitalism.[77] This dialectical process – the attempt to correct the faults of the worldwide resistance against capitalism – is one that differs from historical materialism as formalised Marxism understands it because it observes the survivals of African culture and European imperialism's violent ruptures of African history; Robinson argues:

> Black radicalism […] cannot be understood within the particular context of its genesis. It is not a variant of Western radicalism whose proponents happen to be Black. Rather, it is a specifically African response to an oppression emergent from the immediate determinants of European development in the modern era and framed by orders of human exploitation woven into the interstices of European social life from the inception of Western civilization.[78]

The development of black radicalism constituted a synthesis of Afrocentric historical/cultural insights and Marxism's critical framework.[79] While James was well-versed in Marxism, he found a firmer footing in the historical African and African

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[75] Robinson, *Black Marxism*, 4.
[76] Ibid., 121-122.
[77] Ibid., 43.
[78] Ibid., 73.
[79] Ibid., 68.

diasporic resistance to mass racist subjugation, accepting it in all its bloodiness. European socialism, not unlike European capitalism's racialism that abetted the slave trade, was mostly rooted in economism, whereas black radicalism drew its power from a will towards collective freedom, self-determination, and, at its most urgent, the struggle to avert annihilation. This version of dialectics is foregrounded in my study of the evolution and proliferation of hip hop beat styles as the relationship between underground hip hop culture and the culture industry develops; the historical device of dialectics emerges from European theory, but is furthered by black radicalism's focus on the moments of 'rupture', the revolutionary moments that see subjugated cultures initiate new stages that disrupt or dismantle the power and influence of the dominant capitalist culture. Robinson cites W. E. B. Du Bois's conclusion that slavery existed as a single constituent part of an oppressive, racist institution, not the entire institution itself.[80] This institution, which has served to prop up capitalist hegemony, is still alive today, and can be seen in the sectors of urban America from which hip hop is widely understood to have emerged from: what is known collectively as 'the ghetto'.

Writing in 2008, Tricia Rose finds that there is a continued concealing and protection of racist governance in America through a popular reluctance to question and criticise the ongoing existence of black ghettos:

> Over the last three decades, the public conversation has decidedly moved toward an easy acceptance of black ghetto existence and the belief that black people themselves are responsible for creating ghettos and for choosing to live in them, thus absolving the most powerful segments of society from any responsibility in the creation and maintenance of them.[81]

I suggest that it is from the frustration with these conditions of those trapped within them that many of hip hop's most vibrant local scenes have materialised, harnessing the same negative energy that has powered the black radical tradition. Black America's musical expression is analogous to political expression, and the impetus of musical creativity that is rooted in improvisation and resourcefulness as opposed to fixity and

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[80] Robinson, *Black Marxism*, 200.
[81] Tricia Rose, *The Hip Hop Wars: What We Talk About When We Talk About Hip Hop – and Why It Matters* (New York, NY: Basic Books, 2008), 9.

standardisation reflects the embracing of change, the dissatisfaction with finite categories of thought. Hip hop, then, becomes a music that is practiced as a tool of self-empowerment for the residents of America's black ghettos. This sense of purpose in hip hop solidifies its belonging to the lineage of African and African diasporic music, as Baraka notes: 'If we think of African music as regards its intent, we must see that it differed from Western music in that it was a purely *functional* music'.[82] The significant emphasis that black American musical communities and styles have placed on their contexts, and the manner in which this differentiates them from European-derived musics, is also observed by George E. Lewis, who argues that:

> Improvisative musical utterance, like any music, may be interpreted with reference to historical and cultural contexts. The history of sanctions, segregation, and slavery, imposed upon African Americans by the dominant white American culture, has undoubtedly influenced the evolution of a sociomusical belief system that differs in critical respects from that which has emerged from the dominant culture itself.[83]

The differences in priorities between musics of black origin and European music prompts Lewis to posit the categories Afrological and Eurological, which, while not intended to designate the ethnicities that are permitted to participate in certain musics, delineate disparate approaches to musics that possess improvisatory characters.[84] The Eurological approach is to do with establishing systems through composition that require the performing musicians to follow fixed procedures that yield indeterminate musical results, as in the oeuvre of John Cage,[85] whereas the Afrological approach involves placing musical agency in the hands and voices of the performing musicians, allowing them to forego European musical culture's fixity through its insistence on adherence to a 'style' by nurturing an idiosyncratic – or idiolectic – 'sound'.[86] Lewis claims:

> an improviser working in Afrological forms, "sound," sensibility, personality, and intelligence cannot be separated from an improviser's phenomenal (as distinct from formal) definition of music. Notions of personhood are transmitted via sounds, and sounds become signs for deeper levels of meaning beyond pitches and intervals.[87]

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[82] Baraka, *Blues People*, 28.
[83] George E. Lewis, 'Improvised Music After 1950: Afrological and Eurological Perspectives', *Black Music Research Journal*, 16/1 (Spring, 1996), 91-122 (93).
[84] Ibid.
[85] Ibid., 107.
[86] Ibid., 117
[87] Ibid.

The Afrological approach constitutes a foil to the Eurological pursuit of originality (that is non-derivative, a kind of 'immaculate conception' in musical imagination) because it embodies a materialistic sensibility; musicians of this persuasion take materials such as standardised instruments/technologies, schemes of organising pitch/time, and genres/styles and then extend or distort them to actualise their own personal musical signatures – a conduit for communicating emotional morphologies and reflections on lived experiences. Hence, Afrological improvisatory music-making can be understood as performing the counter-fixity of Marxism as refracted through the black radical tradition. Observing the Eurological approach's proximity to musical styles that have been privileged by the dominant culture, as in Cage's contributions to European music in the Modernist vein, Lewis finds a refusal to acknowledge and dignify the substantial black contributions to experimental music in the 20th century, most notably bebop.[88] Lewis suggests that this is an example of exnomination,[89] a term coined by Fiske which refers to:

> the means by which whiteness avoids being named and thus keeps itself out of the field of interrogation and therefore off the agenda for change [...] One practice of exnomination is the avoidance of self-recognition and self-definition. Defining, for whites, is a process that is always directed outward upon multiple 'others' but never inward upon the definer.[90]

The capitalist culture industry's harnessing of hip hop culture entails a strategy of exnomination, concealing the issues of race and class by playing down (or otherwise outright denying) hip hop culture's blackness in a bid to capitalise on 'urban' aesthetics while attempting to avoid critical scrutiny. These attempts, however, are only partially successful; even when it is not overtly political in terms of lyrical content, hip hop, existing at an underground level, is a radical creative culture that challenges capitalism by the way it is practiced with regard for its contexts. On black vernacular culture's responses to the harms instigated by the dominant culture, Russell A. Potter notes:

> Black history carries the subversive truth that contemporary rationales for poverty, ghettoization, and trickle-down economic policy that justify the increasing wealth of a few

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[88] Lewis, 'Improvised Music After 1950', 99.
[89] Ibid., 100.
[90] John Fiske, *Media matters: Everyday Culture and Political Change* (Minneapolis, MN: University of Minnesota Press, 1994), 42.

on the backs of a growing black underclass are […] part and parcel of […] ongoing capitalistic hegemony, and black arts are the signal site for the return of these repressed realities.[91]

Black vernacular culture's responses to the subjugation cited here by Potter do not necessarily constitute explicit political statements or appeals to the state-sanctioned apparatus of democracy, but take the form of defiant expressions and actions that are woven into the fabric of everyday life lived under the some of the cruellest conditions that have materialised from neoliberal ideology.

One significant deficiency that I have found in much existing scholarship on hip hop music, and popular music more broadly, is that it often seeks to prove that underground musical cultures are politically motivated in that the practitioners are explicit in their positions and arguments. In my view, this tendency overlooks the more potent political ramifications of the practitioners exercising their agencies despite their subjugation (predicated on discrimination rooted in classism, racism, sexism, and so on), lack of institutional recognition and support, and limited access to resources. Musicologists Susan McClary and Robert Walser argue:

> Part of the problem is one that chronically plagues the Left: a desire to find explicit political agendas and intellectual complexity in the art it wants to claim and a distrust of those dimensions of art that appeal to the sense, to physical pleasure. Yet pleasure frequently *is* the politics of music – pleasure as interference, the pleasure of marginalized people that has evaded channelization.[92]

This emphasis on pleasure-as-politics in the face of the dominant culture's violence amounts to an example of what Robin D. G. Kelley regards as 'infrapolitics', a term borrowed from political scientist James C. Scott that refers to actions against hegemony that are more difficult to detect than traditional, conventional methods of political engagement.[93] Elaborating on his invoking of the term, Kelley cites the 'evasive, day-to-day strategies: from footdragging to sabotage, theft at the workplace to absenteeism,

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[91] Russell A. Potter, *Spectacular Vernaculars: Hip-Hop and the Politics of Postmodernism* (Albany, NY: State University of New York Press, 1995), 7.
[92] Susan McClary and Robert Walser, 'Start Making Sense! Musicology Wrestles with Rock' in Frith, Simon and Goodwin, Andrew, (eds.), *On Record: Rock, Pop, and the Written Word* (London: Routledge, 1990), 277-292 (287-288).
[93] Robin D. G. Kelley, *Race Rebels: Culture, Politics, and the Black Working Class* (New York, NY: The Free Press, 1996), 8.

cursing to graffiti' that can be considered infrapolitical.[94] The defiant activity that comprises underground hip hop cultural practice is executed in the same spirit, as the culture has gone about revolutionising privatised space, night-time economics, and definitions of musicianship.

To reiterate, the political implications of early hip hop culture were not openly recognised by its participants. Rather, the drive towards developing alternative cultural outlets at a grassroots level, both by the people and for the people, constituted a pragmatic effort to make life lived under the dominant power structure's abuses easier and more gratifying while presenting the idea of a better future for marginalised communities. As Rose argues, regarding contemporary music:

> Popular music must be dynamic, playful, exciting, and cutting edge. Sometimes this involves politically conscious content, but it surely cannot […] always do so. A crucial aspect of a progressive reclaiming of the soul of hip hop is the refusal to limit the scope of progressive art to the narrow application of "social-consciousness"-oriented topics, as has sometimes been the case.[95]

Rose's insistence on a 'progressive' kind of hip hop culture hinges on the observance of socially constructive potential that is a by-product of pleasurable cultural activity; it is through this avenue that marginalised people are compelled to empower themselves – and each other – by engaging with their communities as a viable alternative to more explicit acts of revolt that might present too great a risk for being 'strategically unwise or successfully contained'.[96]

The inclination of counter-fixity that characterises both infrapolitics (as a defining feature of the black radical tradition's associated culture) and dialectics is, I argue, what propels the advancement of popular music styles as they morph constantly to circumvent the dominant culture's attempts to recuperate them. Moten ventures that music of black origin's true power lies in the fact that it:

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[94] Kelley, *Race Rebels*, 7.
[95] Rose, *The Hip Hop Wars*, 244.
[96] Tricia Rose, *Black Noise: Rap Music and Black Culture in Contemporary America* (Middletown, CT: Wesleyan University Press, 1994), 99.

is not just the hidden transcript of repressed knowledge of alienation but is the reservoir of a certain knowledge of freedom, a counter-inscription anticipatory of the power/discipline that it overwrites and the life-situation against which it prescribes, out from the outside of the regime of signs we now inhabit. This is the knowledge of freedom that is not only before wage-labor but before slavery as well, though the forms it takes are possible only by way of the crucible of the experience of slavery.[97]

This striving for freedom, embodied in musical practices that prioritise unfettered creativity being exercised in the moment and channelling ideas like signifyin(g), is the negative side of the historical dialectic of top-down power against bottom-up power. It is important to remember that while hip hop's earliest participants emerged from an environment that had been subjected to abject state violence, this did not inform every facet of their creativity. Joseph G. Schloss critiques the idea that early hip hop's musical attributes were a direct result of this state violence:

Hip-hop was not created by African American *culture;* it was created by African American *people*, each of whom had volition*,* creativity, and choice as to how to proceed. This becomes apparent when one remembers that hip-hop did not emerge fully formed.[98]

Thus, the oppressive cultural environment of the South Bronx in the 1970s is only half of early hip hop's story – consider that early hip hop was the opening 'stage' of the dialectic of hip hop culture's history, and that in Marxist terms, this stage comprised a base and superstructure of (creative) freedom and poverty that was negated by the record industry (existing as an arm of the capitalist culture industry) to make for subordination and wealth. In the first stage, the freedom should be thought of as just as salient as the poverty in order to acknowledge the technical and musical innovations made by the likes of Kool Herc and Grandmaster Flash. Their contributions as urban master musicians, precursors to beatmakers/producers in recorded hip hop music, were not intended to present an explicit political agenda, but were infrapolitical in their creative subversions of the culture industry's technologies for the purposes of facilitating alternative, working class pleasure.

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[97] Moten, *In the Break*, 227.
[98] Joseph G. Schloss, *Making Beats: The Art of Sample-Based Hip-Hop* (Middletown, CT: Wesleyan University Press, 2012), 26-27.

Knowledge Gods

So far, I have sought to demonstrate how dialectics can be used to understand the impetus of hip hop from a scholarly perspective. This alone, however, is not enough, as the purpose of my study is to acknowledge and respect the artistry of hip hop practitioners as they themselves understand it. What follows is an attempt to realise this, with regard for bodies of vernacular knowledge invoked by hip hop practitioners that are to do with metaphysical and spiritual reflections, reaching beyond the scope of scientific inquiry. Fiske argues:

> Scientific rationalism does not provide the only way of knowing and representing the world, although it claims to. Despite these monopolist ambitions it has to recognize, however reluctantly, that other knowledges exist and contradict it, so part of its strategy of control is to define the realities known by those other knowledges as "unreal" and therefore not worth knowing. This leaves a large terrain of experience epistemologically uncolonized which is available for other, less instrumentally effective, less imperializing knowledges to claim as theirs. What science dismisses as superstition, as coincidence or as self-delusion can, when viewed differently, appear as alternative knowledges whose power is localizing rather than imperializing.[99]

Hip hop music draws inspiration from a variety of such 'alternative' epistemologies, not least the idea of 'soul' that is popularly observed as a central trope in black American vernacular culture. In both critical reception and casual discussion of hip hop music, the word 'soulful' might be used to describe hip hop beats – these beats may be sampling from funk and soul records, in which case the use of 'soulful' might be positing that the beatmaker is borrowing from the musical sensibilities of these genres, but it could also be referring to the suggesting of an elevated feeling experienced in listening, something intangible and therefore impossible to articulate effectively with a scientific, rationalist frame of mind. To explore how openness to the intangible and metaphysical (as opposed to dismissing them as pseudoscientific) in musical experience could be a concern of dialectical thought, I have explored the work and creative philosophies of hip hop practitioners who speak of how they have benefitted from enculturation in alternative bodies of knowledge from a diverse range of cultures.

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[99] Fiske, *Power Plays, Power Works*, 181.

Among the best-known hip hop practitioners known to have drawn from spiritual themes is RZA, the leader of the New York City-based Wu-Tang Clan who produced the majority of the beats on the records released by the group and its individual members as solo artists during their prolific early period of 1993-1997. In *The Wu-Tang Manual*, he details how his fascination with kung fu movies as a child led him to learn about Buddhism and classic Chinese philosophical texts like the *Tao Te Ching* and the *I Ching*.[100] RZA's subsequent interest in Taoism saw him assume a mindset that is dialectical in character, as he describes:

> A lot of people see life in terms of opposites – like, good versus evil, me versus you, valuable versus worthless. Taoists believe you have to see beyond the opposites, to find the real unity among all things.[101]

By embracing such an outlook, consuming media from other cultures and drawing parallels between what he learned and what he experienced in his everyday life as a black resident of New York City, RZA pursued a form of syncretism, mixing ideas in order to make sense of (and survive) his world; his reading of the 1978 kung fu movie *The 36th Chamber of Shaolin* finds that the themes of 'oppression and transformation' that were prevalent in the relations between the story's Manchus (the 'oppressors') and Students (the 'oppressed') could be seen reflected in the situation of contemporary black America under a prevailing culture of white supremacy.[102] From here, I will expound my own investigation of classic Chinese philosophy with regard for dialectical thought and how it has influenced my research into the development of hip hop music.

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[100] The RZA and Chris Norris, The Wu-Tang Manual (New York, NY: Riverhead Books, 2005), 50-51.
[101] Ibid., 53.
[102] The RZA and Chris Norris, *The Tao of Wu* (New York, NY: Riverhead Books, 2009), 53.

Fig. 3.1 – Poster for *The 36ᵗʰ Chamber of Shaolin*

The motif of Tao, or 'Way', is a fundamental element of classic Chinese philosophy that is to do with the conflation of 'absence and 'presence', concepts which serve as each

other's causes.[103] Translator David Hinton notes that because the absence and presence cause each other, they constitute 'one and the same tissue', that is, an indivisible whole.[104] As the *Tao Ching* reads:

> In perennial Absence you see mystery,
> and in perennial Presence you see appearance.
> Though the two are one and the same,
> once they arise, they differ in name.[105]

To reflect on how this relates to Hegel's conception of dialectics, the opposing premises of 'thesis' and 'antithesis' are only observed in isolation for the purposes of analysis; they are in fact necessarily bound together as a singular process: logic. The logic of Tao that asserts the interconnectedness of absence and presence is outlined in the *Tao Ching* by way of three observations:

> Thirty spokes gathered at each hub:
> absence makes the cart work.
> A storage jar fashioned out of clay:
> absence makes the jar work.
> Doors and windows cut in a house:
> absence makes the house work.
>
> Presence gives things their value,
> but absence makes them work.[106]

This demonstrates the practical manifestations of Tao's fundamental dialectic, and is echoed in this passage from the *Te Ching:*

> Return is the movement of Way,
> and yielding the method of Way.
>
> All beneath heaven, the ten thousand things: it's all born of Presence,
> and Presence is born of Absence.[107]

The phase of 'return' is to do with the completion of a cycle – a return to the beginning, and 'yielding' entails allowing this cycle to take its natural course, without interfering with it. The world of phenomena that is 'presence' is able to materialise because of the

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[103] David Hinton (trans.), *The Four Chinese Classics: Tao Te Ching, Analects, Chuang Tzu, Mencius* (Berkeley, CA: Counterpoint, 2013), 20.
[104] Ibid., 20-21.
[105] Ibid., 35.
[106] Ibid., 45.
[107] Ibid., 80.

negative space made by 'absence'. Thus, we have it recapitulated that it is the power of negativity that drives a dialectic.

Further parallels between the Eastern and Western versions of dialectics can be discerned when examining another classic ancient Chinese text: the *I Ching*, or 'Book of Changes'. Richard Wilhelm, in his translation of the *I Ching*, describes how chance operations were used in ancient China to aid people in making decisions in their lives by acknowledging and embracing change, not concerned with describing phenomena and situations in fixed states, but observing the manner in which they change over time by way of two opposing – albeit adjoined – conditions negating each other, growing out of each other. The notion of counter-fixity is as pivotal here as it is in the philosophy of Western dialectics and the black radical tradition's critical furthering of it. By incorporating antithetical ideas that represent 'Heaven' and 'Earth', the workings of the *I Ching* are reminiscent of the chasm between Hegel's idealistic approach to dialectical thought that is geared towards realising an abstract 'Absolute Idea' and Marx's materialistic application of the same process. As attested in the 'Ta Chuan – The Great Treatise' section of the *I Ching*, it is crucial to regard opposing forces as complementing each other, existing as a totality;[108] this principle can be found in C.L.R. James's harnessing of both the idealistic imagination and the grasp of concrete historical concerns, placing the strengths of Hegelian and Marxist dialectics in a sort of meta-dialectic that informs his revolutionary praxis. With the *I Ching* established as an eminently useful text that is in concordance with my theoretical framework, I have used its system of oracles to generate creative prompts for my own beatmaking practice.

Although I hold that the more overtly violent manifestations of the dominant capitalist culture should be attacked wherever and whenever they arise, it seems that it is the dynamism of underground cultures and the culture industry operating against each other that allows popular music to evolve and thrive. One of the key facets of underground

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[108] Richard Wilhelm and Cary F. Baynes (trans.), *The I Ching or Book of Changes*, (London: Routledge & Kegan Paul Ltd, 1968), 281-282.

musical practice that distinguishes it from the production of commercial music is its focus on process, that is, the foregrounding of music as a verb rather than as a noun as it suggested by Christopher Small's term 'musicking',[109] and, with regard for black American culture, the transfiguration of nouns to verbs that signifyin(g) entails. Free musical activity is enmeshed within everyday life, a process that justifies itself, without the contrivance of making fixed, standardised products that can continue to exist beyond the duration of a performance. The attitude of foregrounding process over product is analogous to the element of water as it is referred to in the *Tao Ching*:

> Lofty nobility is like water.
> Water's nobility is to enrich the ten thousand things
> and yet never strive:
> it just settles through places people everywhere loathe.
> Therefore, it's nearly Way.[110]

As a live, party-based culture, it was the process – the domain of the verb – of early hip hop's musical happenings that, paradoxically, was also the nascent scene's product which attracted the youth of the South Bronx. Although the culture industry has worked to fix aspects of hip hop in a capitalist enterprise, I contend that the spirit of hip hop at an underground level, continuing the tradition of black American music, lies in its prioritisation of process. The *Te Ching* offers:

> Finish with the same care you took in beginning
> and you'll avoid ruining things.
> This is why a sage desires without desire,
> never longing for rare treasures,
> learns without learning,
> always returning to what people have passed by.[111]

To practice something for the practice's sake alone is deemed to be an honest, ethical way of living, that is, finding joy in life while refraining from seeking to gain power over anyone else.

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[109] Christopher Small, *Musicking: The Meanings of Performing and Listening* (Hanover: University Press of New England, 1998), 9.
[110] Hinton (trans.), *The Four Chinese Classics*, 42.
[111] Ibid., 64.

Evolution and Proliferation of Style

In Michel Chion's discussion of sound objects, he considers there to be a reconciliation of the concrete and the abstract in how a sound object is conceived through the act of reduced listening to register its material qualities, and then its subsequent musical use, the practical application of the sound as steered by the creative imagination.[112] This dialectic is played out through the technology of musical instruments, as Chion argues:

> the instrument allows us to hear abstract structures of values (directed towards the hearing of meaning) through its concrete potential for play (directed towards the hearing of signs), and improvements made to instruments are usually in an attempt to balance these two aspects.[113]

Thus, dialectics are present in the fabric of music throughout its conception and performance. Hip hop's 'instruments' comprise signified-on technologies that have become entrenched in the culture, or otherwise remain esoteric yet essential devices to beatmakers who choose to practice more unusual, idiosyncratic techniques in what David Toop describes as: 'the quest for fire, the desire to make a groove so hard and heavy that it crush[es] and burn[s] everything in its path'.[114]

Toop identifies several tracks as being pivotal in the early development of hip hop as a genre of recorded music, including Grandmaster Flash's 1981 single 'The Adventures Of Grandmaster Flash On The Wheels Of Steel'.[115] This track, though released by Sugar Hill Records, eschews the label's established style of MCs rhyming over live instrumentation emulating breaks, instead offering a DJ mix that demonstrates Flash's turntable techniques, cutting briskly between various classic hip hop breaks, previous Sugar Hill singles, and found sounds to make for a composition that resembled what hip hop culture sounded like in its original, party-based form. Toop notes that:

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[112] Michel Chion, *Guide to Sound Objects*, trans. by John Dack and Caroline North (Leicester: EARS De Montfort University, 2009), 37.
[113] Ibid., 38.
[114] Toop, *Rap Attack #3*, 158.
[115] Grandmaster Flash / Grandmaster Flash And The Furious Five, 'The Adventures Of Grandmaster Flash On The Wheels Of Steel / The Party Mix' (Sugar Hill Records, 1981).

> 'Adventures On the Wheels of Steel' was the first record really to show that rap was something other than an offshoot of disco. Where other releases translated hip hop, 'Adventures' was as close as any record would ever come to being hip hop.[116]

I contend that this record is hip hop music's first moment of 'synthesis' in the dialectical sense, as it saw a practitioner of early hip hop producing a composition with roots in an underground hip hop sensibility being made to exist on a medium introduced by the culture industry's recuperation of the culture. All the hardness of early hip hop musical style is present, albeit in a condensed form temporally, allowing it to exist on one side of a 12" vinyl record. This moment demonstrated that 'real' hip hop, and new underground stylistic evolutions that are aligned with the underlying aesthetics and priorities of 'real' hip hop, could continue to emerge and spread via recorded media.

Another significant development of 1980s hip hop music production was the popularity of the drum machine-based production style of beats by the group Run-DMC and record producer Rick Rubin. The 1983 Run-DMC track 'Hard Times' assumes a markedly slower tempo to the output of Sugar Hill Records that comprised the previous standard in commercial rap music, lurching forward with a crashing drum beat that has more in common with hard rock than the fluid, multi-layered breaks that early underground hip hop looped and early commercial hip hop emulated.[117] This served to prefigure Run-DMC's rap/rock crossover attempts of their future releases, namely the 1985 album *King of Rock*.[118] The sparse kick-and-snare beat of the verse sections of 'Hard Times' makes for long intervals of negative space between hits, and when the track's refrain thickens the texture by introducing a single-note bass riff and synth stabs (evidencing the lingering influence of electro-funk as heard in earlier hip hop singles like 'Planet Rock'), it only augments the feeling of austerity. The resultant toughness of the beat reflects – and heightens – the effect of the track's lyrics as they speak of defiance in the face of financial hardship:

> Hard times are coming to your town
> So stay alert, don't let them get you down

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[116] Toop, *Rap Attack #3*, 107.
[117] Run-DMC, 'Hard Times / Jam-Master Jay' (Profile Records, 1983).
[118] Run-DMC, *King of Rock* (Profile Records, PRO-1205, 1985).

> They tell you times are tough, you hear that times are hard
> But when you work for that ace you know you pulled the right card.[119]

Similarly, 'It's Yours' by T La Rock & Jazzy Jay is carried by a drum machine beat playing mostly in isolation, foregrounding the tight, bass-heavy sound of the Roland TR-808.[120] Flows of looping drum patterns are set up and then arrested by the ruptures of record scratching – a recapitulation of early underground hip hop style committed to a recorded medium like in 'The Adventures Of Grandmaster Flash On The Wheels Of Steel'. The key difference between 'It's Yours' and 'Hard Times' lies in their respective tempi; 'It's Yours' plays at 99bpm, which, while still slower than most of the Sugar Hill Records singles that came before it, is closer to the speed of classic hard funk breaks than 'Hard Times', signalling a return to the more danceable pace of early underground hip hop but retaining the hard-hitting programmed drum loops that Def Jam favoured. Through these production choices, combining break-based sensibilities with manual drum programming, another moment of 'synthesis' in hip hop beatmaking's evolution can be found.

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[119] Run-DMC, 'Hard Times / Jam-Master Jay'.
[120] T La Rock & Jazzy Jay, 'It's Yours' (Partytime Records, Def Jam Recordings, 1984).

Fig. 3.2 – 12" single of 'It's Yours' by T La Rock & Jazzy Jay

The syntheses that I observe in the history of hip hop music are to do with the affronting
of standardisation through musical counter-fixity that defines black American vernacular
music, including hard funk and the many periods and offshoots of 'jazz' in addition to rap.
Addressing the 'screaming' and 'honking' sounds that characterised the techniques of
saxophonists in blues music after the Second World War, Baraka argues:

> The point, it seemed, was to spend oneself with as much attention as possible, and also to
> make the instruments sound as unmusical, or as non-Western, it was almost as if the blues
> people were reacting against the softness and "legitimacy" that had crept into black
> instrumental music with the advent of swing.[121]

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[121] Baraka, *Blues People*, 172.

This affront to 'legitimacy' is a reclaiming of music from hegemony through bold gestures and sonic antagonism, amplified by the *negation of the negation* that is the co-opting of the culture industry's mechanisms in order to help extend the scope of underground music. Rather than regarding the culture industry as simply being a destructive force to hip hop culture, hip hop artists saw in it an opportunity to get themselves heard beyond the confines of their locales and provide inspiration for the culture's subsequent generations. On her group's recorded output, MC Sha-Rock reflects:

> We [Funky 4 + 1] had just gone to a different level. We basically had left the street scene and started recording […] So you had the other groups to come up and represent for New York, a lot of different groups emerging that may not have made a record yet were out in the streets. That gave a lot of other groups the opportunity to spruce up and get to the point where they needed to be, for people to hear them.[122]

As older groups like Funky 4 + 1 left the deepest frontier of hip hop's underground in the early 1980s, a void was created that was to be filled by a new vanguard who in turn, would themselves go on to become recording artists in the mid-to-late 1980s, synthesising new styles by modifying, extending, and fusing existing musical approaches.

Discussing the further commercialisation of the hip hop's tropes in the 1980s, exemplified by the production of hip hop-themed movies, Jeff Chang argues:

> Hip-hop had been reduced to a kid-friendly Broadway production, scrubbed clean for prime-time, force-fitted into one-size-fits-all […] Hollywood had broadcast hip-hop onto tiny islands in the Pacific and into teeming working-class ethnic suburbs in Europe, but the spitshined thing only increased the craving for the *real* thing.[123]

The heightened appetite for the output of musical undergrounds unfettered by the strategic sanitisation of the culture industry has been a key factor in the history of black American vernacular music at large. Baraka observes that after early jazz became a form of commercial recorded music, many blues musicians returned to underground scenes where they could practice a form of music that allowed for more improvisatory self-expression, beyond mere recital.[124] Black American music's returns to the underground have problematised the outlook that commercialisation is, necessarily, a musical culture's

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[122] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 216.
[123] Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation* (London: Ebury Press, 2007), 194.
[124] Baraka, *Blues People*, 166.

dead end. While Adorno and Horkheimer argue that: 'Culture as a common denominator already contains in embryo that schematization and process of cataloguing and classification which bring culture within the sphere of administration',[125] they neglect to consider the potential for this fixity to be undone, unfixed, itself negated as part of a cycle of a cultural paradigm's historical development. Relatedly, I believe that the proliferation of hip hop styles has also exposed Adorno and Horkheimer's affront to the prioritisation of pleasure in the production of cultural materials as shallow; they claim:

> Pleasure always means not to think about anything, to forget suffering even where it is shown. Basically it is helplessness. It is flight; not, as is asserted, flight from a wretched reality, but from the last remaining thought of resistance. The liberation which amusement promises is freedom from thought and from negation.[126]

Here, pleasure is considered something that is used by the culture industry as a tool to pacify its consumers, to prevent revolt, but as hip hop has shown, there must be a certain pursuit of joy for non-commercial vernacular creative activities to crystalise into discernible autonomous cultures, and by an underground culture that remains independent of the culture industry (all the while defying and subverting the culture industry's codes and materials) through alternative means of pleasure like block parties, a compelling strategy of infrapolitics is exercised, that is, an evasion of the hegemonic dominant culture's influence (albeit a transient one) through the same spirit as the black radical tradition, affording participants a vehicle for self-empowerment in their own individual creative faculties.

Although I am regarding the culture industry as an instrument of hegemony, the effectiveness of the instrument is always limited – it never fully succeeds in negating the subordinate power of the underground. The culture industry cannot complete a monopoly on cultural production because of its 'limited voraciousness', that is, its dependence on newly emerging novel creative forms that only the underground is capable of instigating. However, the reverse is also true: grassroots cultural production, with its specialism being resourcefulness in technique (the practical application of

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[125] Adorno and Horkheimer, *Dialectic of Enlightenment*, 131.
[126] Ibid., 144.

technology, the domain of the 'verb'), needs materials and structures to bend to their will (the 'nouns', devices that are to be unfixed by free creative activity), and thus, as Gottdiener asserts: 'The two realms of cultural production are dependent on each other'.[127] Here we see the indivisible totality – the 'yin' and 'yang' – of culture's historical development. Like Baraka, Potter highlights the history of the relationship between black American music and the culture industry being one of bottom-up power struggling against top-down power across racial lines, insofar as record companies have sought to monetise creative developments of black musicians, ostensibly celebrating black artistry if prompted to, but failing to compensate or aid black musicians in any meaningful way.[128] With this tendency being all too familiar to many black musicians, Potter notes that: 'Conscious of this recurring act of appropriation, African-American artists have again and again wrenched new time out of old, refusing and interrupting the commodification of their work'.[129] Such a response is easy to discern in hip hop music's evolution – in fact, it could even be considered the principal reason for hip hop's continued existence, as Potter argues:

> authenticity is staked on an innovation whose closure is its commodification – that is, at the moment it becomes identifiable, its modes reproducible, it dies. The inbuilt resistance of hip-hop to such a death lies in its ability to continually reinvent itself; like the toasters and sound-system deejays of ska and reggae, hip-hop takes version as a verb, not a noun.[130]

Thus, hip hop cheats 'death', not by eliminating the possibility, but by keeping it at a distance. Hip hop culture does not actively seek to eradicate the exploitative system of capitalism, since its participants are tacitly aware that they are incapable of doing so, but it can, as Potter suggests, work within capitalism's mechanisms in a pragmatic strategy of resistance:

> hip-hop is not merely a critique of capitalism, it is a counter-formation that takes up capitalism's gaps and contradictions and creates a whole new mode, a whole new economics. It is a mode that, inevitably, exercises a huge attraction on capitalistic machines, since it seems to promise a virtually endless source of new waves on which corporate surfers can try their luck [...] and yet it can also drown them in the tide or leave them caught in some suddenly motionless backwater.[131]

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[127] Gottdiener, 'Hegemony and Mass Culture: A Semiotic Approach', 998
[128] Potter, *Spectacular Vernaculars*, 4.
[129] Ibid.
[130] Ibid., 72.
[131] Ibid., 111.

In order to sustain this praxis, underground hip hop music operates as an avant-garde, surrendering to the dialectic between imagination and economy that is justified by Moten when he observes how cutting-edge black American musics are haunted by a 'spectre of Hegel' in concordance with James's contention that the black radical tradition and the European conception of dialectics are compatible.[132] What guarantees the future supremacy of underground cultures over the culture industry is the idea of 'commitment', as Thomas defines it:

> Commitment to the quest, to making the moment mean something, but also commitment to a quest for heightened understanding, for the Absolute, for the spiritual realm beyond the artifice of material and biological realities.[133]

While hip hop music is truly materialistic, its petitioning of the metaphysical – the foregrounding of soul and the alchemical transformation of the past's lead into the future's gold through mental activity – cannot be overlooked. Rather, these two axes of creativity are in fact symbiotic; for evidence, one only needs to listen to beats produced at the early stages of hip hop's several regional scenes across its history.

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[132] Moten, *In the Break*, 31.
[133] Thomas, 'The Impossible Vs. the Unthinkable'.

Chapter 4 – Beatmaking Technoculture

Well I'm the Benihana chef on the SP12
I chop the fuck out the beats left on the shelf.[1]

Musical Technoculture

My study of the practical ramifications of hip hop beatmaking and the ways in which beatmaking styles have proliferated is one that is necessitates an examination of the relationship between hip hop culture and its associated technologies. This critical intersection makes for what might be called a *technoculture*, a term used by René T. A. Lysloff and Leslie C. Gay that describes:

> communities and forms of cultural practice that have emerged in response to changing media and information technologies, forms characterized by technological adaptation, avoidance, subversion, or resistance.[2]

Here, it is understood that technology – meaning devices designed to perform certain functions *and* the techniques devised for people to operate these devices – is key to understanding how and why cultures emerge and change. In their positions as ethnomusicologists, Lysloff and Gay problematise any assumption that there is any sort of 'distinction, even conflict, between technology and culture' in music,[3] instead regarding them as working in tandem, as is apparent in how people who involve themselves with music production explore and extend the standardised devices that have been imposed on them and the more esoteric devices that they themselves have chosen.

In hip hop music, changes in the availability of technology have resulted in changes in the culture's landscape; an early example of such a change can be found in the famous New

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[1] Beastie Boys, 'Putting Shame in Your Game', *Hello Nasty* (Capitol Records, 1998).
[2] René T. A. Lysloff and Leslie C. Gay, 'Introduction: Ethnomusicology in the Twenty-first Century' in Lysloff, René T. A. and Gay, Leslie C., (eds.), *Music and Technoculture* (Middletown, CT: Wesleyan University Press, 2003), 1-22 (2).
[3] Ibid.

York City blackout of 1977, during which there was widespread looting of shops that sold audio equipment. Grandmaster Caz remembers:

> I see this store called the Sound Room that was one of the first audio stores. There was like eighteen people on the metal gate. Boom. They pull down the gate and kick in the glass. People are crawling in there and running out with speakers and turntables.[4]

This looting, happening during the nascent stage of hip hop culture, two years before the first commercial hip hop records, served as a catalyst for more young people to become active as instigators of parties, as DJ Disco Wiz recalls: 'Before that blackout, you had maybe five legitimate crews of DJs. After the blackout, you had a DJ on every block… That blackout made a big spark in the hip-hop revolution'.[5] Naturally, the subsequent developments that have made access to music technology easier and cheaper have caused large increases in the numbers of active beatmakers.

The ascendancy of software-based technological platforms has brought about a significant change in hip hop music's technoculture in the form of a challenge to DJing/beatmaking's traditional treatment of the record and turntable as keystones. André Sirois believes that the 'ritualistic' aspect of digging for vinyl records that was originally central to DJing has since been compromised by the contemporary prevalence of digital DJing software and controller hardware systems such as Serato DJ,[6] and the use of features like 'sync' that are implemented on these systems to enable DJs to align the tempi of two disparate tracks at the single touch of a button is considered by many hip hop purists to be unacceptable.[7] Modern beatmaking, an extension of DJing that materialised in line with hip hop music's status as a recorded medium, faces similar issues pertaining to authenticity in its technocultural situation. Devices like readymade template project files for music production software as offered by the website Splice allow the novice beatmaker to start putting a beat of a certain style together very quickly, albeit without any real musical sophistication in terms of structure and texture.

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[4] Jim Fricke, Charlie Ahearn, and Nelson George, *Yes, Yes, Y'all: The Experience Music Project Oral History of Hip Hop's First Decade* (Boston, MA: Da Capo Press, 2002), 132.

[5] Ibid., 133.

[6] André Sirois, *Hip Hop DJs and the Evolution of Technology: Cultural Exchange, Innovation, and Democratization* (New York, NY: Peter Lang Publishing, 2016), 145.

[7] Ibid., 26.

Splice's justification of their commercial model is that they are in fact only facilitating creativity, not dictating it, by making musical materials easier to access. Another service Splice offers is a library of 'premium samples, loops, and presets' that can be downloaded and used in a beatmaker's preferred software;[8] by including presets for software synths like Serum, Sylenth, and Massive,[9] Splice is extending the idea of the audio sample library – a long-established type of resource sometimes derided for enabling 'cheating' – into lists of instrument data. The technocultural question here is: can anything really be learned and expressed by the beatmaker when they use commercial tools-within-tools like these? Is the prevailing spirit of hip hop's inherent codes, the sensibilities that oppose uniformity and standardisation through an insistence on creativity that is carried on one's own effort and ingenuity, being betrayed?

In an effort to theorise about what technocultures are comprised of in finer detail, Lysloff and Gay propose that there are three axes on which technologies and cultures intersect: the 'ontological', concerning what a piece of technology *is* in the most materialistic terms; the 'pragmatic', to do with how the technology is used; and the 'phenomenological', to do with how the technology produces cultural resonances beyond its practical use.[10] In the 'pragmatic', there is a mode of agency that Lysloff and Gay identify as '*knowledge*', which entails:

> understanding the significance of a device or phenomenon [by] learning what it can or is supposed to do. This can range from fully understanding its constitution (its scientific principles or construction) to simply intuiting its intended use (or potential uses).[11]

It is in the acquisition and nurturing of this 'knowledge' that I believe the essential facets of hip hop beatmaking's technoculture can be found, as beatmakers expose and explode the latent potential of technology by discovering ways of using it that go beyond the designations of its manufacturers.

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[8] 'Splice', *Splice*, 2018, https://splice.com/features/sounds (31st January, 2018).
[9] Ibid.
[10] Lysloff and Gay, 'Introduction', 3-4.
[11] Ibid., 4.

M. Gottdiener, in his semiotic analysis of hegemony, identifies a process of 'transfunctionalization' where an object can be understood in terms that lie beyond its original function, resulting in it taking on new meanings that are relevant to new contexts. This process is performed by both the agents of the culture industry and of underground cultures, as Gottdiener observes:

> The transfunctionalized objects produced by social groups and the needs that are generated by everyday life eventually become the raw material for cultural production by the mass culture industries […] if subcultures can take the objects of mass culture and provide them with second-order meanings, mass culture producers can do the same to the personalized objects of subcultures.[12]

An example of transfunctionalization occurring within the technoculture of hip hop can be found in how the vinyl record's meanings were augmented to account for the strengthening of (sub)cultural and social capital in grassroots live musical enterprises, the weaving together of black American music's history, and the sense of the 'real' that comes with technical skills gleaned from practical musical experience, superseding the item's initial status as one of the culture industry's instruments for generating profit. Here, early hip hop culture's reinterpretation – through transfunctionalization – of the vinyl record constitutes a negative stage of a dialectic, whereas the culture industry's intended application of the format was the original, positive stage.

Regarding musicians' receptions of sounds, Michel Chion proposes a distinction of 'musical' versus 'musicianly' attitudes, where the former 'refers back to traditional heritage, to established and accepted structures and values', and the latter 'seeks rather to locate interesting new phenomena or to innovate in the facture of sound objects' – in short, an inclination towards adhering to existing values in the organisations of sound versus a will towards imagining new values.[13] This can be found in musical contexts beyond *musique concrète*, whenever and wherever transfunctionalization in music technology occurs. Underground hip hop's innovations in new styles of beats evidence

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[12] M. Gottdiener, 'Hegemony and Mass Culture: A Semiotic Approach', *American Journal of Sociology*, 90/5 (Mar., 1985), 979-1001 (996).
[13] Michel Chion, *Guide to Sound Objects*, trans. by John Dack and Caroline North (Leicester: EARS De Montfort University, 2009), 39.

this 'musicianly' mode of listening and creativity; addressing hip hop culture's earliest DJs, DJ Baron remembers:

> Herc started with PA columns and guitar amps. All DJs in the Bronx started like that. There was no mixer, no power amps – it was a guitar amp and speakers. He used to switch from turntable to turntable on a guitar amp, from channel one to channel two. That's how mixing started out. As he did parties and accumulated his money, his set got better.[14]

Through such resourcefulness with repurposed devices (using a guitar amplifier instead of a mixer and specialised amplifier), Herc decentralised a technology that had previously contributed to the definition of professional musicmaking to a significant degree in that it inspired wave upon wave of young people to try DJing themselves with whatever equipment they could find. As John Connell and Chris Gibson find, technology's advancements have ramifications for the political geographies of specific places in that they: 'transform spaces of consumption, as different generations navigate the trends and styles of contemporary popular culture'.[15] Changes in available technologies and the ways in which they are used result in counter-fixity in music, which exposes the erroneous nature of any assumptions that location-specific musics are fixed in single spaces and subject to inflexible codes of practice that must be followed in order to satisfy expectations of authenticity.[16] An insistence on fixity in vernacular music is only voiced when the associated culture's purity is considered to be threatened by commodification. In this sense, notions of authenticity and cultural preservation are reactionary and unintuitive. As a result of transfunctionalization being played out in technology, the technoculture of hip hop has always been constantly in flux, sustaining a dialectical situation between the culture industry and underground culture.

In his study of hip hop DJ technology, Sirois proposes that rather than innovations in technique happening in response to – and being made possible by – developments made by technology companies, it is the technology's users who are the innovators. This is a

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[14] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 28.
[15] John Connell and Chris Gibson, *Sound Tracks: Popular music, identity and place* (London: Routledge, 2003), 45.
[16] Ibid., 46.

critical point, and one that serves as a point of departure for the formulation of Sirois's idea of 'technocultural synergism', which entails:

> a cycle of thesis and antithesis that produces new technological systems as its synthesis; however, it should be understood as political as it creates intellectual property and financial haves and have-nots, and needs to be addressed critically.[17]

Hence, technocultural synergism describes an ongoing dialectic that starts with underground culture's resourcefulness in techniques and results in technology companies creating products to capitalise on these techniques. Sirois finds that companies like Technics have been championed for producing hardware that has been durable and versatile enough to become standardised by underground hip hop culture, namely the Technics SL-1200 turntable, but also criticised for not 'giving back' to DJ culture after making considerable amounts of money from the popularisation of its product.[18] This situation can be likened to how labels like Sugar Hill capitalised on early hip hop culture in 1979 – offering young people the chance to be heard by more people on one hand, but exploiting them on the other. Linking the histories of hip hop style's appropriation and hip hop technoculture's appropriation, Sirois notes how Grandmaster Flash had no real involvement in the production of 'Freedom' and 'The Message', but Sugar Hill credited him as part of the artist name (Grandmaster Flash and the Furious Five) in order to benefit from the subcultural capital of his moniker; eventually, Flash sued Sugar Hill and won, as it was found that through his work he had created a 'common law' trademark in his name, and this enabled him to use his brand to endorse DJ equipment.[19] Indeed, the 'Flashformer' device, manufactured by Gemini, was the first example of a signature product of a well-known DJ,[20] showing how technocultural synergism results in DJs and musicians themselves becoming intellectual properties.[21]

To address hip hop beatmaking, a practice that has its roots in hip hop DJing, I contend that technocultural synergism has also been the main driver in the evolution of music production technologies like samplers, drum machines, sequencing software, and virtual

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[17] Sirois, *Hip Hop DJs and the Evolution of Technology*, xv.
[18] Ibid., 37.
[19] Ibid., 122-123.
[20] Ibid., 24.
[21] Ibid., 120.

instruments. The relationships between technology companies and hip hop beatmakers are ones of virtual, sometimes unwitting collaboration, and are hinted at in examples of media such as the 'Rhythm Roulette' series of videos on YouTube, as music production equipment – in addition to branded apparel and drinks – is visible in what effectively functions as a form of advertising.[22] Thus, my study of hip hop beatmaking necessitates a consideration of the technologies that have made the practice possible, by way of the inventiveness of underground hip hop culture's practitioners at least as much as the engineering of the technologies' manufacturers.

Hardware and Harder-ware

Despite the considerable advancement from the looping of breaks played in isolation that characterised the sound of the earliest hip hop parties, hip hop has remained a music that is, for the most part, anchored by drums. This sees hip hop aligned with other black American musics informed by the West African musical traditions that foreground rhythmic beating. This beating, John Mowitt notes, originated as human skin on human skin, that is, a dancer's hands striking parts of their own body in the practice of 'patting *juba*',[23] before evolving gradually to entail human skin beating on animal skin to make for greater volume and a wider range of possible sounds. With organising drums in hip hop beatmaking, which has been to do with the use of drum machines, samplers, and software, I argue that there has been a further, rather radical organological development in beating, where the 'percussive field' that Mowitt identifies is broadened to include processes that may not necessarily entail any real-time physical contact at all.

In an article that lists some of the most important samplers in the history of popular music, Laurent Fintoni describes how a technological device's secondary, tertiary, or even latent technical capabilities can be used as primary compositional capabilities as part of

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[22] 'Rhythm Roulette: Mannie Fresh (Live From The Sprite Corner)', *YouTube*, 2015, https://www.youtube.com/watch?v=n4Y-_ZjIeNg (16th August, 2019).

[23] John Mowitt, *Percussion: Drumming, Beating, Striking* (Durham, NC: Duke University Press, 2002), 16.

novel creative strategies.[24] Such musical ingenuity through misuse is precisely what provoked hip hop beatmaking's most striking techniques and forceful sounds, as Tricia Rose observes:

> Using […] machines in ways that have not been intended, by pushing on established boundaries of music engineering, rap producers have developed an art out of recording with the sound meters well into the distortion zone. When necessary, they deliberately work in the red. If recording in the red will produce the heavy dark growling sound desired, rap producers record in the red.[25]

Expanding on the manner in which hip hop has embraced distortion in practice, Hank Shocklee finds that there is a telling figurative parallel that provides further indications of hip hop's sensibilities noting that:

> hip-hop has been made from the distortion of technology […] and I don't mean by just verbally just distorting it. I'm talking about using it in ways that the manufacturers never intended it to be used.[26]

Although hip hop music's technologies can often be regarded as limited, they were not just chosen because they were the only options available; Joseph G. Schloss attacks the assumption that hip hop's first practitioners resorted to resources such as turntables and records instead of 'real' musical instruments because they were poor – these resources were in fact very expensive, sometimes even more so than 'real' instruments.[27] The real reason was to do with signifyin(g) on technology and breathing new life into musical materials such as break beats that became favourites throughout the South Bronx in the 1970s, in addition to the excitement of the high volume levels pumped out by the sound systems.

Among the most vital types of hardware in the history of beatmaking is the drum machine, an electronic device that plays back rhythms, either by a user operating its

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[24] Laurent Fintoni, '15 samplers that shaped modern music – and the musicians who use them', *FACT Magazine: Music News, New Music.*, 2016, http://www.factmag.com/2016/09/15/15-samplers-that-shaped-modern-music/ (3rd October, 2016).

[25] Tricia Rose, *Black Noise: Rap Music and Black Culture in Contemporary America* (Middletown, CT: Wesleyan University Press, 1994), 75.

[26] Ali Shaheed Muhammad and Frannie Kelley, 'Hank Shocklee: 'We Had Something to Prove'', *Microphone Check : NPR*, 2015, https://www.npr.org/sections/microphonecheck/2015/04/16/399817846/hank-shocklee-we-had-something-to-prove (14th June, 2017).

[27] Joseph G. Schloss, *Making Beats: The Art of Sample-Based Hip-Hop* (Middletown, CT: Wesleyan University Press, 2012), 28-30.

buttons in real-time or from prior programming, using sampled or synthesised drum

sounds. The first hip hop musician to use a drum machine is thought to be Grandmaster

Flash, who supplemented his live sets with additional rhythms that he played from an

early drum machine produced by Vox – a company best known for producing guitar

amplifiers – which helped to cement his group's reputation as one of New York's best

crews for how they maintained their position at the forefront of the culture.[28] Another

drum machine that has been used to bolster live hip hop DJ sets, and a device that has

gone on to become arguably the most celebrated piece of hardware in hip hop

production, is the Roland TR-808. Marley Marl claims that before the TR-808 became

familiar to hip hop beatmakers, he was the first to use it solely for its ability to produce

powerful, prominent bass:

> I was with my 808 drum machine […] Me and Shanté was doing a show for Luke and Ghetto
> Style DJs, before he even had 2 Live Crew […] before they even started their sound! There
> was no 808 beats out there. There was not. What I did, I brought my 808 to a show, cuz I
> used to play live beats while she rhymed. I went up there with my 808, and was [imitates
> sounds] BOOM… Everybody ran over to the boot like, "What is THAT?"[29]

The robust low end frequencies that the TR-808 can produce serves as an example of

creative misuse in the technoculture of beatmaking, since rather than only using its kick

drum channel for simple, short kick drum sounds as was intended by Roland, beatmakers

have pushed its sustain level setting to produce long bass sounds, as Shocklee states:

> What do we do with the 808? We increase the decay on it and get that crazy sustain, the
> crazy rumble. And what is that doing? That's actually wrong. Because what it's doing —
> we're taking low-end. We're putting it on the record. And it's distorting the speakers. It's
> also bad for the vinyl cause vinyl can't handle that. But we didn't care anyway. We wanted
> to feel that bottom end.[30]

This latent function of the TR-808 helped it to become a more coveted piece of hardware

to hip hop producers than the contemporaneous Linn LM-1 drum machine, despite it

costing over $3,000 less and having drum sounds that were considered far inferior by

professional musicians working outside of hip hop for being relatively artificial and

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[28] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, 145.
The Vox drum machine, dubbed the 'beat box' by Flash, is shown in a video uploaded by radio station Hot 97
to be the Vox V829 Percussion King.
'Grandmaster Flash Talks "The Theory" Of Being A HipHop DJ & The Beginnings Of Hip-Hop!!', *YouTube*, 2016,
https://youtu.be/m3YXyK-gWvc (22nd August, 2019).
[29] Amir Said, *The BeatTips Manual: Beatmaking, the Hip Hop/Rap Music Tradition, and the Common Composer*
(Brooklyn, NY: Superchamp Books, 2009), 344.
[30] Muhammad and Kelley, 'Hank Shocklee: 'We Had Something to Prove''.

synthetic.[31] In fact, this synthetic quality was heard by beatmakers and producers of the

1980s not as cheap, but as futuristic, as it provided the drum loops on Afrika Bambaataa

& the Soul Sonic Force's 1982 single 'Planet Rock' which became wildly popular for its

transparently electronic, Kraftwerk-inspired sound.[32] This development, stemming from

the hardness of the TR-808's drum sounds, saw producers start to regard drum machines

not as substitutes for 'real' instruments, but as instruments in and of themselves with

desirable sonic attributes. Andrew Goodwin finds that because of the TR-808,

electronically produced handclap sounds, by way of their ubiquity in commercial records,

began to sound as 'natural' to both musicians and listeners as the real human handclaps

that had previously existed as black American music's most 'authentic' sound to the

extent that sample-based drum machines were being used to sample the TR-808's

handclap sound instead of real handclaps.[33] Despite this, the primary function of the

handclap remained largely as the drum stroke for beats 2 and 4, answering the kick drum

in a role not dissimilar to the snare's. For an example of a type of drum stroke that has

found itself transfunctionalized by technology, and by the TR-808 specifically, the hi-hat

demands attention. Referring to the former James Brown sideman and much-sampled

drummer Clyde Stubblefield, Rowan Oliver observes 'the importance of the hi-hat's role

in establishing a groove', that is, the role of governing the pace of a performance, albeit

while also using a variety of 'open' and 'closed' strokes to imbue the groove with subtle

expressions which are then transplanted from hard funk records to hip hop beats via the

sampling of break beats.[34] However, in much modern hip hop, particularly within the trap

style, the TR-808 hi-hat sound is deployed in a way that sees it playing in stuttering

rhythms that change from bar to bar, giving a beat a less cyclical nature and more of a

progressive, linear rhythmic scheme that is at odds with hip hop music's tendency to be

based on looping figures. By the ways in which beatmakers have used the TR-808's

sounds as tools for establishing new tropes in hip hop, Roland's drum machine has been

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[31] Scott Wilson, 'The 14 drum machines that shaped modern music', *FACT Magazine: Music News, New Music.*, 2016, http://www.factmag.com/2016/09/22/the-14-drum-machines-that-shaped-modern-music/ (11th October, 2016).

[32] Afrika Bambaataa & the Soul Sonic Force, 'Planet Rock', (Tommy Boy, 1982).

[33] Andrew Goodwin, 'Sample and Hold: Pop Music in the Digital Age of Reproduction' in Frith, Simon and Goodwin, Andrew, (eds.), *On Record: Rock, Pop, and the Written Word* (London: Routledge, 1990), 258-273 (265-266).

[34] Rowan Oliver, *Rebecoming Analogue: Groove, Breakbeats and Sampling* (PhD thesis, University of Hull, 2015), 76.

standardised as one of the culture's key devices; as Scott Wilson argues: 'Even in today's post-genre landscape, the 808 is the familiar trope that links many disparate styles'.[35]

Fig. 4.1 – The Roland TR-808

On the strength of 'Planet Rock', musicians from 1980s Miami set about replicating and then building on the 'electro-funk' crossover of hip hop's funk-derived impetus and the electronic sound-worlds of Kraftwerk with the TR-808 being the principal instrument; Roni Sarig cites the 1983 singles 'Computer Funk' by Osé and 'Fix It In The Mix' by Pretty Tony as being early examples of 808-driven electronic dance music.[36] By the mid-to-late 1980s, the hardware sampler had become the most prominent tool in hip hop beatmaking as the culture's 'golden age' began in New York City, but the sound of the TR-808's bass remained popular with Miami-based groups like 2 Live Crew.[37] The burgeoning 'Miami bass' scene also adopted sampling technology on some of its more sonically adventurous releases, as Dynamix II's 1987 single 'Just Give the DJ a Break' uses an Emu

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[35] Scott Wilson, 'The 14 drum machines that shaped modern music', *FACT Magazine: Music News, New Music.*, 2016, http://www.factmag.com/2016/09/22/the-14-drum-machines-that-shaped-modern-music/ (11th October, 2016).

[36] Roni Sarig, *Third Coast: OutKast, Timbaland, and How Hip-Hop Became a Southern Thing* (Boston, MA: Da Capo Press, 2007), 13-14.

Osé, 'Computer Funk', (Bound Sound Records, 1983).

Pretty Tony, 'Fix It In The Mix', (Music Specialists, 1983).

[37] Sarig, *Third Coast*, 14-15.

SP-12 sampler to sample the TR-808's bass-heavy kick drum sound and then pitches it up and down to play a bass riff, making for a synthesis of the drum machine and sampling technologies that defined 1980s beatmaking.[38] Such innovation also provoked syntheses between technologies that weren't limited to music production, like the one between Miami's bass-oriented music culture and its car culture that spawned the subgenre 'car audio bass', where the custom sound systems of cars were made to be able to project very loud, yet clean low frequencies that exaggerated the boom of the TR-808 even further.[39] The trope of hip hop (or hip hop-related) styles and car culture being intertwined has endured throughout what came to be known as 'Southern' rap music from the 1990s onward, particularly in Houston, as I will explore in Chapter 5.

The other technological breakthrough besides the drum machine that revolutionised the still-young hip hop in the 1980s was emergence of the sampler. The world's first hardware sampler is recognised as the Fairlight CMI, or Computer Musical Instrument, originally released in 1979. This device, Fintoni notes, was primarily a computer-based synthesiser with sampling being a secondary function,[40] but it was a function that proved to be highly desirable to musicians and record producers. Tim Lawrence highlights that a Fairlight was used for the production of 'Planet Rock', introducing synthetic string melodies between verses to help realise the single's crossover potential, since Bambaataa's intention was to produce a record that would 'appeal to the white crowd and still keep the sound that would appeal to the hip hoppers', through an explicitly electronic style.[41] In terms of hip hop beatmakers' embrace of sampling, Marley Marl claims that it was he who discovered and pioneered the process of replacing the stock, built-in sounds of hardware drum machines with drum sounds lifted from existing records when he was making a beat with both a sampler and a drum machine simultaneously:

> I was getting another part of the record [to play through a sampler], and we didn't truncate it yet. The snare was there with the vocal. I was playing a beat that I made on the drum

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[38] Dynamix II Featuring Too Tough Tee, 'Just Give The DJ A Break' (Cooltempo, 1987).
[39] Sarig, *Third Coast*, 30.
[40] Fintoni, '15 samplers that shaped modern music – and the musicians who use them'.
[41] Tim Lawrence, *Life and Death on the New York Dance Floor, 1980-1983* (Durham, NC: Duke University Press, 2016), 288-290.

machine, and I heard the sampled snare playing with it. Then I realized… I was like, "Yo, I can take any kick and snare from ANY of my break-beat records on how rap should sound".[42]

Marl clarifies that by continuing to use drum hits sampled from records that were familiar and sounded good to him, he sought to 'make rap sound *accurate*', that is, to lend the recorded form of hip hop music the hard, gritty timbral profiles of the hard funk records that were used for looping breaks in New York City's street music scene of the 1970s.[43] An example of this can be heard in Marl's beat for the Eric B. & Rakim track 'Eric B. is President', which samples drum hits from the Honey Dripper's track 'Impeach the President',[44] as he explains:

> People really thought I was using James Brown when I made 'Eric B. is President', but I wasn't, I was using 'Impeach the President', and the way I played the sample was [with] a James Brown feel.[45]

This, I find, demonstrates a *negation of the negation* executed in beatmaking practice, as the colder, digital sound of drum machines on early 1980s hip hop records initially superseded the organic, fluid strokes of hard funk drummers that were heard in the live hip hop sets of the 1970s, and then underground beatmakers from hip hop's 'golden age' reintroduced the timbral and rhythmic properties of hard funk drumming by embracing the new digital technology while replacing the digital stock sounds of the machines.

The widespread use of sampling by underground beatmakers of the late 1980s was enabled by the arrival of dedicated samplers that had enough memory to be able to hold several seconds of sound data as opposed to only short drum hits. David Toop argues that the use of these machines resulted in a 'raw, xerox feel' that was compatible with hardness of hip hop's aesthetics, making them more appropriate tools than devices like the Fairlight CMI.[46] This preference for a relatively 'lo-fi' sound is confirmed by Shocklee, who while producing beats for early Public Enemy tracks possessed both a 4-bit Ensoniq

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[42] Said, *The BeatTips Manual*, 335.
[43] Ibid.
During an interview in the film *Deep Crates* 2, Marl reveals that the sampled snare drum in question was from 'I Can't Stop' by John Davis and the Monster Orchestra.
Deep Crates 2, by Jerry Weisfeld, 2007, 64 min. (DVD, Beatdawg Films).
[44] Eric B. Featuring Rakim, 'Eric B. Is President / My Melody', (Zakia Records, 1986).
[45] *Deep Crates 2*, Weisfeld.
[46] David Toop, *Rap Attack #3* (London: Serpent's Tail, 2000), 192.

Mirage sampler and a technically superior 8-bit Akai S900, but was more inclined to use the Mirage because the S900 produced sonic results that were: 'Too shiny. Too correct'.[47] It was not Ensoniq but the company E-Mu Systems, however, who designed what turned out to be hip hop beatmaking's first standardised sampler with their SP-12 released in 1986, and a revised version, the SP-1200 released in 1987. E-Mu, aware of how hip hop beatmakers were using sampling technology, opted not to install any preset drum sounds on the SP-1200 like they did with the SP-12, while allowing for sound data to be saved on floppy disks.[48] This meant that beatmakers could assemble personal libraries of sounds that adhered to their own sonic signatures; the lo-fi grain of Emu's SP series is mostly associated with New York 'boom bap' style hop beatmakers like Large Professor, but it has also been used by beatmakers from other parts of the United States in the development of region-specific styles. The New Orleans-based in-house Cash Money Records producer Mannie Fresh, for example, has used an SP-1200 for much of his career, because, as he puts it:

> I've got different drum machines that I use for different things, but I think the older ones are always the best when it comes down to getting that 808 bass […] That's why you've gotta have a 1200 or something like it — you can't do it with nothing new because it's gonna sound too digital.[49]

This method of playing the TR-808's booming bass sound through the SP-1200 in order to lend it the lo-fi heft that comes from the hardware's 12-bit word length, 26 kHz sample rate, and filter chips is demonstrated by Mannie Fresh in a short video that sees him playing the beat from the 2001 Lil Wayne single 'Shine',[50] using the SP-1200's controls to slide the pitch of the drums up and down in real time while the programmed patterns are looped.[51] Another classic type of hardware sampler that has become one of hip hop beatmaking's standardised devices is Akai's MPC, a series designed by the drum machine pioneer Roger Linn to compete with E-Mu's SP models that originally surfaced in 1988

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[47] Muhammad and Kelley, 'Hank Shocklee: 'We Had Something to Prove''.
[48] Fintoni, '15 samplers that shaped modern music – and the musicians who use them'.
[49] Bill Murphy, 'BOUNCE ON THE BRAIN', *EMusician*, 2017, http://www.emusician.com/gear/bounce-on-the-brain (29th August, 2019).
[50] Lil Wayne, 'Shine', (Cash Money Records, 2001).
[51] 'Mannie Fresh Shows Us How He Made The Lil Wayne Beat "Shine"', *YouTube*, 2018, http://youtu.be/GZcK1bdMxc8 (29th August, 2019).

with the MPC60 model.[52] This machine superseded the SP-1200 as hip hop's standard sampler in the 1990s as a result of its more user-friendly interface and its incorporation of pressure-sensitive rubber pads as opposed to hard plastic buttons, allowing for different sounds to be played from a single pad depending on how hard it is pressed.[53] The fluid yet robust functionality of Akai's series was vital to the early recorded output of DJ Shadow, produced entirely with vinyl records, turntables, and an MPC. The MPC was so fundamental in Shadow's work that the title of a 2012 collection of his previously-unreleased beats from 1992-1996 refers to the period as his '*MPC Era*'; its tracks, such as 'Freddi's Popcorn', evidence dense combinations of sampled phrases that have been 'chopped' using the MPC's integrated digital editing functions to adhere to the dimension of 'layering' that lies at the heart of hip hop music's aesthetics.[54] The MPC's popularity with beatmakers saw its 4x4 layout of drum pads become something of an iconic image that invokes hip hop style, and thus one that has been replicated by more recent music production tools like Maschine by Native Instruments in a bid to appeal to beatmakers who want to benefit from modern, software-based music technology while keeping a hands-on physical workflow of the same type that was practiced by the most celebrated hip hop producers of the 1980s and 1990s.[55]

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[52] Phil Siarri, 'The MPC 60: A drum machine that revolutionized music production', *Medium*, 2019, https://medium.com/1-one-infinity/the-mpc-60-a-drum-machine-that-revolutionized-music-production-1ad6f3c9de18 (2nd September, 2019).

[53] Alexander Aciman, 'The AKAI MPC: the drum machine that changed popular music', *Vox*, 2018, http://www.vox.com/culture/2018/4/16/16615352/akai-mpc-music-history-impact (29th August, 2019).

[54] DJ Shadow, *Total Breakdown: Hidden Transmissions From The MPC Era, 1992-1996* (Reconstruction Productions, 2012).

[55] Sherbourne, Simon, 'Native Instruments Maschine', *Sound on Sound*, 2009, https://www.soundonsound.com/reviews/native-instruments-maschine-mk1 (5th September, 2019).

Fig. 4.2 – Mannie Fresh using an E-Mu SP-1200

Although samplers with drum machine style operation have proven to be the most popular with hip hop beatmakers, samplers with the keyboard-based operation that the Fairlight CMI introduced have not been overlooked entirely. The Ensoniq EPS sampling keyboard was used in the 1990s by both RZA of the Wu-Tang Clan and Havoc of Mobb Deep in conjunction with drum machine style samplers, enabling them to mix coarse drum beats from 12-bit hardware (SP-1200 and MPC60) with lusher, 16-bit (matching CD quality's bit depth) sounds that were subjected to Ensoniq's built-in digital effects.[56]

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[56] Fintoni, '15 samplers that shaped modern music – and the musicians who use them'.

Discussing his work making beats for the album *Enter The Wu-Tang (36 Chambers)*, RZA explains:

> The EPS was a keyboard, the SP was a drum machine. The keyboard style become more my style, because I started playing my samples like melodies […] I would start sampling one note and playing it on different notes of the keyboard. I started chopping things down to notes and chords, not knowing which chords they were but knowing them as sounds.[57]

By using a keyboard-based instrument in a way that does not regard the workings of harmony in Western music but nevertheless pitching samples in both linear figures and vertically stacked layers, RZA affirms that knowledge of Western musical devices is not applicable to hip hop beatmaking, yet his more intuitive mode of composition is made possible by a signifyin(g) on of the EPS's keyboard layout. Moreover, RZA notes that his beats for the tracks 'Method Man' and 'Wu-Tang Clan Ain't Nuthin' to Fuck With' were made upstairs from his aunt's apartment using: stolen electricity […] a little eight-track, an […] SP1200 sampler, and an Ensoniq EPS 16 Plus sampling keyboard that I got from hustling. It was the true hip-hop means of production.[58] RZA's convergence of professional music technology and allusions to criminality conjures an unwieldy, volatile dynamism that mirrors the essence of hip hop practice: making powerful and raw music through technical excellence in a less-than-ideal world.

Although the widespread contemporary use of the word 'technology' generally has it refer to technological devices, a more holistic definition would hold that the word should include the human application of such objects; the consideration of the 'verbs' of technique in addition to the 'nouns' of equipment. A properly critical examination of music technology as it has been developed in hip hop needs to address how the actions of musicians necessarily constitute technologies as well as their chosen tools. This determination has marked the difference between examples of musically successful endeavours in hip hop culture versus endeavours that have languished because of a lack of commitment to one's personal craft. The latter is exemplified by the how Kool Herc was eventually eclipsed as New York City's premier underground party DJ, as groups like

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[57] The RZA and Chris Norris, *The Wu-Tang Manual* (New York, NY: Riverhead Books, 2005), 196-197.
[58] The RZA and Chris Norris, *The Tao of Wu* (New York, NY: Riverhead Books, 2009), 111-112.

Grandmaster Flash's honed techniques that improved the fluidity and sophistication of their mixes, as Flash himself remembers:

> Herc really slipped up. With the monstrous power he had he couldn't mix too well. He was playing little breaks but it would sound so sloppy […] At the time he wasn't using no cueing. In other words, the hole was there for a headphone to go in but I remember he never had headphones over his ears. All of a sudden, Herc had headphones but I guess he was so used to dropping the needle by eyesight and trying to mix it that from the audio part of it he couldn't get into it too well.[59]

The advancement of technique through a commitment to personal technical practice, operating as an important driver in 'technocultural synergism', has been equally crucial in the practice of hip hop beatmaking; RZA, reflecting on how he learned to use his SP-1200, states that he refused to read instruction manuals, preferring to discover the potential of his hardware in a strictly practical way – a recreational activity in itself, learning through the 'joy' of simply *doing*: 'I love mastering beat machines […] I buy it just to master it'.[60] By ignoring the manufacturer's instructions and going straight into a tactile engagement with their tools, beatmakers unfix their technological devices and bend them towards working as hip hop-oriented instruments.

Layering is one of the main areas in which beatmakers have furthered the 'technique' axis of music technology. The film *Secondhand Sureshots* shows producers Daedalus and J.Rocc triggering their recorded samples from an MPC while simultaneously playing back a record on a turntable in a form of experimentation, probing possible combinations of sounds in an improvisatory manner.[61] This approach, of relying on one's ears to find combinations of sounds that can be aligned and looped before going about finalising a beat takes hip hop beatmaking practice back to the pure DJing of early hip hop through the timing and mixing of disparate records, and as such, has been a familiar way of working for beatmakers from the culture's 'golden age' onward. Among these beatmakers is RZA, who describes:

> One thing I discovered was that you could have ten unrelated things playing at the same time, as long as each was at the right amplitude. So even though the track might not be on

[59] Toop, *Rap Attack #3*, 62.
[60] 'RZA and Paul Banks', *Talkhouse*, 2016, http://www.talkhouse.com/artist/rza-paul-banks (3rd May, 2017).
[61] *Secondhand Sureshots*, by Mark "frosty" McNeill and Bryan "Morpho" Younce, 2010, 30 min. (DVD, Stones Throw).

beat, because of the volume level of the drums, the pulse forces everything to fall on beat. That way can put one thing at a tempo of 100 beats per minute, another at [1]20, another at 150, with the drums going at a steady tempo of 95. Everything else – it might be strings, a bass sample from a Stax record, a sample from a Russian choir – can be made to fall into place.[62]

RZA suggests that his process of sample-based beatmaking is to do with making subtle adjustments to find balances that complement his own emotional states at given moments:

You are a 64-track recording – the tracks are always there, they're always with you. Sometimes the harsh tracks are cranked up and the rest are rolled down to zero. Other times the sweet tracks are high and the darkness is low.[63]

Through careful mixing of levels, the balances that RZA composes are made to not sound dissonant, even if the individual sampled sounds are playing at different tempi and in different harmonic keys; although the sound quality may be relatively 'lo-fi' on a technical level due to the hardware that he uses, his approach can be considered 'hi-fi' in that it allows for a multiplicity of possible feelings to be communicated in his music. Contrasting with this approach, Shocklee claims that the Bomb Squad's beats for Public Enemy's tracks – while being made up of synchronous sonic elements like RZA's – were always deliberately made in a way that neglected to mask the fact that their chosen samples clashed,[64] resulting in an unwaveringly uneasy and agitated feeling throughout the group's seminal first three albums. This is a matter of idiolectic beatmaking style; sample-based production may have been the predominant method in late 1980s and early 1990s hip hop music, but it was a method that could accommodate a diversity of personal artistic attitudes.

While professional music production technology moved away from the development and use of hardware to become increasingly software-based throughout the 1990s and into the 2000s, many hip hop beatmakers retained an attachment to their drum machines and samplers, since, as Fintoni suggests:

To those who grew up with them, or have come to love them, hardware samplers simply sound different from software. They're tactile and can behave in unpredictable ways.

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[62] RZA and Norris, *The Tao of Wu*, 115.
[63] Ibid., 117.
[64] Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation* (London: Ebury Press, 2007), 260.

> There's an intangible, hard-to-define quality to hardware samplers that software simply cannot replicate.[65]

It is apparent that beatmakers who have worked predominantly with sample-based methods do not always have the kindest view of software-based music technology being used in modern hip hop. Speaking in 2015, Ali Shaheed Muhammad, one of the producers of the group A Tribe Called Quest alongside Q-Tip, ventures:

> It's like, you can go to many websites now and they'll have templates made. Let's just go on trap sub-genre of hip-hop and there'll be like a thousand templates. And all you gotta do is drag that into your application you're using, be it Logic, Ableton Live, whatever, change a couple of drum sounds and now your sketch is the same [...] it just seems like there's such a desire to make it big so fast that you choose to the quick and easy route. And so that kills the music a little bit.[66]

What concerns Muhammad is that the use of music production software may have fostered a normalisation of 'biting', that is, copying the style of others, which was previously considered by some as a serious *faux pas* in hip hop, and that this is both the effect and cause of modern artists' wishes to be commercially viable using formulaic means rather than exploratory and idiolectic musical craft. However, it should be noted that it is disingenuous to conflate the use of templates with computer-based production tools in general, as DAW (digital audio workstation) systems are highly configurable, allowing beatmakers to develop sophisticated combinations of virtual instruments and effects plugins that complement their personal musical signatures and preferred workflows. Indeed, computer-based setups have become commonplace, helped in no small way by how cheap they are to assemble. Wilson states:

> At the end of the 2000s, the computer had won. Expensive synthesizers were replaced by software versions, MPCs and sequencers were replaced by Ableton to arrange tracks, and most of the hardware being made were MIDI controllers designed to control parameters on a screen. In 1980, a Linndrum would have cost $4,995; in 2009 you could get a software version that made pretty much the same sound for free.[67]

Hip hop's old school sensibilities were not jettisoned altogether, however, as developers of software-based music technology have made successful attempts to appeal to emulate the sound – and in some cases, feel and workflow – of classic beatmaking hardware. For example, in my beatmaking practice, I use Steinberg's Groove Agent virtual instrument, a

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[65] Fintoni, '15 samplers that shaped modern music – and the musicians who use them'.
[66] Muhammad and Kelley, 'Hank Shocklee: 'We Had Something to Prove''.
[67] Wilson, 'The 14 drum machines that shaped modern music'.

sample-based drum machine simulator that features a 'vintage' sample playback quality mode that can be selected to apply a SP-1200-esque lo-fi grain to the sampled sounds,[68] and to trigger these sounds I use a MPK Mini MIDI controller produced by Akai, incorporating a two-octave keyboard and eight drum pads that resemble those of same company's MPC series. This basic setup is consistent with the modern standard that comprises a hybrid of hardware and software, where the hardware takes the form of devices that allow for the digital input of audio signals (from vinyl played on a turntable, for instance) and allow for physical control to be translated to (principally MIDI) data, while the software edits, processes, and mixes sounds to build a track. To operate my setup upon preparing my sonic source materials and virtual instruments requires engagement with more than one technological device at a time, which makes it somewhat incongruous with sample-based hip hop's tradition of beatmakers composing on a single machine, like the SP-1200 or MPC. Another system that is similar to Maschine is Akai's MPC Renaissance which is now used by one of sample-based hip hop beatmaking's most famous names, DJ Premier,[69] indicating that music technology companies' measured syntheses of hardware and software amounts to an acceptably 'old school' type of workflow, and yet, because of their inability to produce actual sound independently of any other devices, it would not be accurate to regard these systems as complete musical instruments in their own right. Addressing Maschine, Wilson observes: 'it's the most powerful electronic rhythm creation tool in history, but with over a thousand kick drums alone to choose from, it doesn't really have a sound to speak of'.[70] Ultimately, hardware/software hybrid setups are more defined by the software side because it is from there that the outputted sounds materialise. Prince Paul observes that it is impossible to listen to a beatmaker's work and be able to tell which version of Pro Tools they are using on their computer,[71] since modern production makes for a huge number of potential sounds and processes that modify these sounds compared to the hardware setups of the 1980s and early 1990s. Thus, beatmaking using computers, even

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[68] Steinberg Media Technologies GmbH, *Groove Agent SE4* (Frankfurt: Steinberg Media Technologies GmbH, 2014).
[69] 'DJ Premier and Prince Paul', *Talkhouse*, 2016, http://www.talkhouse.com/artist/dj-premier-prince-paul (3rd May, 2017).
[70] Wilson, 'The 14 drum machines that shaped modern music'.
[71] 'DJ Premier and Prince Paul'.

when done through hardware controllers, cannot always be defined by the distinct affordances of the equipment involved – everything is contingent on the beatmaker's musical imagination.

Another way in which beatmaking technology has evolved since the 1990s is that producers are more inclined to use tools that lie beyond standardised devices like drum machines, samplers, and setups that emulate these traditional tools of hip hop production. Clams Casino, in a discussion with DJ Shadow, alludes to his use of apps on his smartphone to devise musical figures that he incorporates into his beat;[72] The smartphone may not be widely regarded as a technological device with a recognisable place in hip hop culture, but like the turntable, it is transformed from being a tool for the dissemination and consumption of media into a tool for creative production – a noun-to-verb transformation that is congruent with hip hop's adherence to the strategy of signifyin(g). The implication here is that anything that can produce and/or manipulate sound can be made into a beatmaking tool. Reflecting on his career as a beatmaker, DJ Toomp recalls that when working with East Coast artists he would instinctively opt for sampling hardware like the MPC and with West Coast artists he would go to the virtual synthesiser-oriented software Reason, but with Southern artists, who have historically shunned hip hop's conventions in manifold ways, he felt that he could use 'everything'.[73] What this 'everything' can entail, without compromising the perceivable hip hop-ness of a beat, has been a matter of much contention as the genre of hip hop has continued to grow in popularity.

As the practice of sampling from existing commercial records became legally risky after the 1991 case of Grand Upright Music, Ltd. v. Warner Bros. Records Inc. on the back of Biz Markie's track 'Alone Again', underground beatmakers found themselves having to look beyond samples for their sonic materials. Wayne Marshall highlights that:

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[72] 'DJ Shadow and Clams Casino', *Talkhouse*, 2016, http://www.talkhouse.com/artist/dj-shadow-clams-casino (3rd May, 2017).
[73] Said, *The BeatTips Manual*, 374.

Between paying the record labels, who typically own the mechanical rights to sound recordings, and the writers and/or companies who own the publishing rights – none of which, of course, necessarily goes to the samplee – most hip-hop artists with limited (if not nonexistent) budgets could never hope to afford such a pricey but prized production technique.[74]

This problem has also been an obstacle for hip hop artists on the periphery of the mainstream. Ray Murray of the Atlanta-based production team Organized Noize – a team that is notable for working on the first four OutKast albums – remembers that when he was involved in projects that were overseen by songwriter and manager Perri "Pebbles" Reid, most notably the R&B group TLC, she did not permit him to sample anything at all.[75] This request ensured that Organized Noize did not cause any awkward legal problems for Reid to deal with, but it also served to help the team develop an approach to hip hop production that capitalised on their access to a professional recording studio.[76] For the group's work on the first OutKast album, 1994's *Southernplayalisticadillacmuzik*, they hired local musicians to perform original parts on live instruments;[77] the musical result was something that resembled the coarse 'boom bap' sound of New York City rap, albeit with the kind of relatively clean sound and consideration for melody that saw Dr. Dre's 'G-funk' style characterise and dominate West Coast hip hop in the early 1990s.[78] This made for a synthesis of East Coast and West Coast hip hop style that laid the blueprint for Southern hip hop's commercial ascendancy in the mid-to-late 1990s.

In response to the increasing use of live instruments in hip hop production, many beatmakers who use sampling as their principal technique – such as Jake One, interviewed by Schloss – assert that producing by recording original sonic material only is unacceptably inauthentic.[79] Schloss explains:

Because musical instruments can play anything, the producer is not constrained by the nature of a particular musical performance on a particular old record. While this could

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[74] Wayne Marshall, 'Giving up Hip-Hop's Firstborn: A Quest for the Real after the Death of Sampling', *Callaloo*, 29/3 (Summer, 2006), 868-892 (877).

[75] Sarig, *Third Coast*, 124.

[76] Ibid., 125.

[77] Ibid., 130-132.

[78] Ibid., 133.

OutKast, *Southernplayalisticadillacmuzik* (LaFace Records, 73008-26010-2, 1994).

[79] Schloss, *Making* Beats, 67.

conceivably be seen as liberating, producers are more inclined to see it as cheating. This is where the purist sensibility begins to emerge.[80]

This purism comprises an effort to protect hip hop's traditions from any interference that might come from practices and aesthetics of other genres of music – basically, if we assume that hip hop is a style that can only exist if it can constitute an extension of the basic idea of a looping break, that is, finding sounds on an existing record that can be repurposed as part of a new (albeit necessarily derivative) groove like a crate digger and/or using well-practiced technical skills to loop a section seamlessly like a turntablist, then it cannot allow for the use of original grooves made up of new elements composed and recorded by a beatmaker. Here, it is possible to discern in underground hip hop culture a recapitulation of an implicit distrust of conventional musicianship and studio environments – after all, it was through these that the first ersatz deviation from the street parties of the South Bronx materialised (1979's 'Rapper's Delight'). Countering this notion, Marshall presents the example of the Roots, a hip hop group that does not use samples, instead producing tracks using only live instrumentation. Because the Roots do not operate using a DJ like most other crews, they have had to overcome 'an inherent obstacle to their authenticity', as Marshall argues:

> Ironically, the Roots' formal training [with conventional musical instruments] qualify them for one kind of realness, if a Eurocentric one, while disqualifying them from another. So even as they celebrate the aesthetic values and emulate the sonic markers associated with hip-hop traditions established by DJs and producers, the Roots also struggle against prevailing ideas about "hip-hop musicianship" which exclude formally trained instrumentalists from the realm of the "real".[81]

From my perspective, with the belief that hip hop has always been subject to change in terms of its agents, styles, and technologies, the Roots's chosen method of production should be considered a viable, recognisable version of hip hop practice insofar as it is predicated on looping beats and flowing rhymes, and the jettisoning of hip hop's established standardised technologies and technical approaches is simply another example of the culture's intrinsic spirit of counter-fixity. Reflecting on the strictly practical dimension of hip hop played on live instruments, Marshall insists:

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[80] Schloss, *Making* Beats, 69.
[81] Marshall, 'Giving up Hip-Hop's Firstborn', 871.

the Roots' instrumental facility afford them a certain flexibility and freedom and allows them to advance a unique, if markedly experimental, voice within the creative constraints of "traditional" hip-hop's somewhat conservative conventions.[82]

The tactile processes involved in the production may be different to the sample-based model, but there is more to 'process' than physical application; there also the mental domain where musical ideas germinate through the dialectic of spontaneity and careful consideration. The Roots's drummer ?uestlove realises the analogue, lo-fi crunch of 'golden age' hip hop without the use of turntables and samplers by a focus on timbre in the preparation of his drums, as Marshall describes:

> Much like a sample-based producer's store of digital kicks and snares and hi-hats, ?uest's drums can differ substantially from song to song. By reproducing the cherished timbres of breakbeats sampled from '60s and '70s recordings, ?uestlove savvily produces the "real" without having to sample a particular record for its "aura".[83]

In addition to the taming of sonic force and the pursuance of signifyin(g)'s various manifestations, hip hop's musical practice is about showcasing technical skill; ?uestlove's approach to drumming is undoubtedly an example of this. Hence, the priorities of hip hop and the use of live instruments do not have to be mutually exclusive; even Marley Marl, among sample-based beatmaking's totemic practitioners, has nurtured working relationships with Queensbridge-based instrumentalists, inviting them to play in his DJ sets, as a way to 'make the peace' between hip hop DJs and more conventional musicians.[84] Furthermore, Marl appears to question the validity of this distinction as he points out that hip hop's emergence in the 1970s was, at least partially, down to cuts in mandatory music lessons in schools, as while there were less young people were forming bands, they could still become musicians by involving themselves in a musical culture that was thriving in spite of the local government's negligence.[85]

Video Games and the Demoscene

For my own creative practice, I have sought to develop yet more ways of making beats with technical approaches that either extend or reach beyond the scope of hip hop's

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[82] Marshall, 'Giving up Hip-Hop's Firstborn', 880.
[83] Ibid., 886.
[84] Said, *The BeatTips Manual*, 336.
[85] Ibid., 337.

traditional technologies; the results of my research entail a harnessing of 'retro' microcomputers and video games consoles as tools for the composition of hip hop beats. RZA, reflecting on his youth before he formed the Wu-Tang Clan, regards hip hop as only one single constituent part of his experience, stating that: 'Hip-hop was always a youth thing and youth read comics. The whole subculture of America – comics, martial arts movies, skateboarding – it's all part of our culture'.[86] This constellation of youth interests, as comprehensive as it may seem, neglects to mention one important facet that has established itself as a dominant leisure activity: video games. Inevitably, the electronic sounds of video games from the late 1980s and early 1990s impacted on many young beatmakers through the hours that they spent with joysticks in their hands; as J.Rocc puts it:

> without all of us hip hop kids knowing, [...] that 8-bit, 16-bit music somehow, some way influenced all of us, because we all played video games. You had to play video games back then – it was no joke.[87]

This connection between hip hop and video games dates back to the time of the earliest rap records that were made by the underground culture's practitioners. Toop highlights the prevalence of arcades in New York City around 1982; the effervescent electronic sounds of arcade cabinets – which at the time predominantly used simple PSG (programmable sound generator) chips like the AY-3-8910 – were thought of as 'funky' by young Americans for how they were reminiscent of Kraftwerk's music and the electro-tinged dance records that were inspired by the German group.[88]

By the early 1990s, hip hop's increasingly global influence was starting to become apparent in video game music. For the widely acclaimed soundtrack of Sega's 1992 game *Streets of Rage 2*, Japanese video game music composer Yuzo Koshiro produced a collection of tunes composed for the Sega Mega Drive console's sound hardware – the Yamaha YM2612 FM synthesis chip coupled with the Texas Instruments SN76489 PSG chip – that borrowed liberally from the electro-funk and hip hop styles. The track 'Too

[86] RZA and Norris, *The Wu-Tang Manual*, 86.
[87] 'The Rise of VGM | Diggin' in the Carts | Red Bull Music', *YouTube*, 2014, https://youtu.be/m8z8-SKg3WU (28th July, 2017).
[88] Toop, *Rap Attack #3*, 129-130.

Deep' from this soundtrack features a piercing, upward whistle-like sonic gesture that repeats on one of the FM synth chip's six channels in a figure that is largely identical to the looping horn screech that contributes a feeling of intense uneasiness to Public Enemy's track 'Rebel Without a Pause', a sound that the Bomb Squad sampled from the opening section of 'The Grunt' by James Brown's group the J.B.s.[89] Here, we can observe the emergent two-way exchange between VGM and hip hop, demonstrating that sound chips of microcomputers and video games consoles of the 1980s and 1990s are capable of playing beat-based music to a convincing degree.

A particularly striking and popular application of video games hardware to make electronic music can be found in the use of trackers; these computer programs work by playing cascades of note data that are mapped to user-programmed sounds and effects across a sound chip's channels. Among the most widely used trackers is *ProTracker*, running on the Commodore Amiga series of microcomputers.[90] This program, capitalising on the Amiga's 'Paula' sound chip that provides four sample-based channels, opened the world of sampling, editing, and sequencing to amateur musicians inexpensively. With an 8-bit word length and sample rates of up to 28 kHz, the Amiga's digital sampling capabilities rivalled those of high-end professional music production tools (by comparison, the Fairlight CMI offers 8-bit word length and sample rates of up to 32 kHz), and thus spawned a subgenre of four-channel electronic dance music in the early 1990s. The 1992 track 'Jungle Love' by the Amiga musician Hoffman, existing as a *ProTracker* MOD file that eventually appeared on the 2011 Amiga 'musicdisk' compilation *8-bit Jungle*,[91] is made up of drum breaks that have been cut into smaller segments that are heavily detuned in the form that they assume as sample data, but are heard playing back at higher frequencies in the programmed note data so that they are more usable in a musical capacity.[92] The way these segments are triggered in the track's programmed note data patterns makes for complex rhythmic reconfigurations; on this extensive

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[89] Ancient Co. Ltd, *Streets of Rage 2* (Hawyard, CA: Sega of America, Inc., 1993).Public Enemy, 'Rebel Without a Pause' (Def Jam Recordings, 1987).
The J.B.s, 'The Grunt' (King Records, 1970).
[90] Lars Hamre, Anders Hamre, Sven Vahsen, and Rune Johnsrud, *ProTracker* (Amiga Freelancers, 1990).
[91] MOD is a digital file extension that is short for 'module'.
[92] Unstable Label, *8-bit Jungle* (Unstable Label, 2011).

manipulation of breaks – oftentimes the 'Amen' break, sampled from 'Amen, Brother' by the Winstons – in drum and bass music,[93] Simon Reynolds notes:

> these rhythmic innovations matured into a veritable breakbeat science. Sampled and fed into the computer, beats were chopped up, resequenced and processed with ever-increasing degrees of complexity.[94]

By finding breaks, isolating them, doctoring them, and then fusing them together using computer software, musicians practice what Reynolds calls 'breakbeat science', a highly technical, laborious process that: 'isn't exactly fun; but the hope is that the end results will be spectacular, or devastating'.[95] This ostensibly un-fun and calculated mode of creativity is not compatible with the immediacy of playing arcade games, but instead resembles the careful preparation of a character or party for battle in a Japanese Role Playing Game (or JRPG), where the player is required to find items and spells, refine them, equip them strategically, and then gain abilities.[96] Due to the multiple roles performed by the MOD musician, including composer, engineer, and distributor, Lysloff argues that there is a 'subversive' character to the practice that is: 'much like punk garage bands with their DIY sensibilities, because it undercuts the division of labor in conventional music production and distribution.[97] Thus, to a certain extent, the technoculture of MOD music mirrors that of underground hip hop. Moreover, the requirement for musicians to demonstrate high levels of technical skill in order to gain cultural capital within these respective scenes makes for: 'a kind of geek adolescent techno-machismo',[98] fostering competitive cultures rooted in seeing and hearing who can get the most out of limited technological affordances.

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[93] The Winstons, 'Color Him Father / Amen, Brother', (Metromedia Records, 1969).
[94] Simon Reynolds, *Energy Flash: A Journey Through Rave Music and Dance Culture* (London: Picador, 1998), 241.
[95] Ibid., 241.
[96] Michael Philip Bridgewater, 'Play on Any Platform: Between Hip-Hop Beatmaking and Video Games', *The UK Annual of Postgraduate Hip Hop Studies*, (2019), 51-69 (66).
[97] René T. A. Lysloff, 'Musical Life in Softcity: An Internet Ethnography' in Lysloff, René T. A. & Gay, Leslie C., (eds.), *Music and Technoculture* (Middletown, CT: Wesleyan University Press, 2003), 23-63 (34).
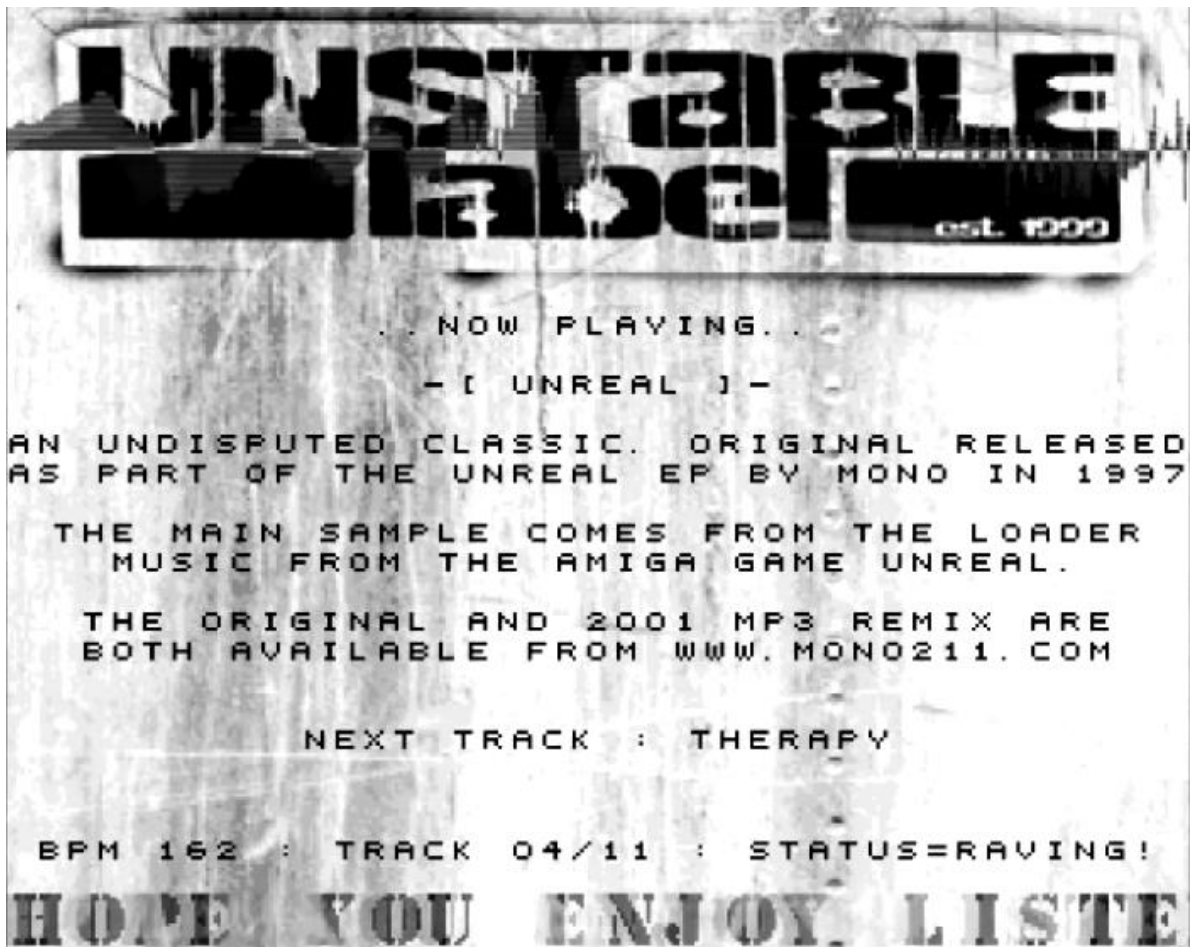[98] Ibid., 38.

Fig. 4.3 – The Amiga 'musicdisk' *8-bit Jungle*

Related to the MOD scene, and another competitive scene rooted in creative activities using computers, is the demoscene. This complex underground technoculture has its roots in the software cracking scene of the 1980s, where groups of pirates removed the copy protections from commercial computer programs such as video games and distributed them for free, placing an 'intro' on the disk that would play before the program is loaded, displaying visual effects and scrolling text in displays of technical prowess. By the early 1990s, the production of these intros had become a more serious discipline, with groups expanding the scope of intros, seeing them become 'demos' – standalone programs containing sophisticated coded visual effects routines, painterly graphics pieces, and compelling music that are entered into competitions at events called demoparties. Through my own involvement in the demoscene, I have produced compositions for a variety of 'retro' computer and console platforms – principally the

Commodore 64 – that are influenced by beat-based contemporary music.[99] The Commodore 64 stands apart from other 8-bit microcomputers for its sound chip, the SID (Sound Interface Device), which is not just a basic PSG of the kind that features in systems such as the Sinclair ZX Spectrum 128 and the Nintendo Entertainment System, but works as a fully-fledged analogue subtractive synthesiser through its range of capabilities including channels that can switch between different waveform types, pulse-width modulation, filtering, hard sync, and ring modulation. Thus, in experienced hands, the SID can produce sonic results that can be compared to the sound of the classic Minimoog Model-D synthesiser. However, it is also possible to use the SID as a tool in the production of music without doing any programming, but by sampling the chip playing an existing tune. An example of a beatmaker working in this way can be heard in producer Timbaland's production on the 2007 Nelly Furtado single 'Do It',[100] which extensively samples – and resultantly bases its lead melody and harmonic progression on – the SID tune 'Acid Jazz' by the Finnish demoscene musician Glenn Rune Gallefoss,[101] itself a cover version of the MOD tune 'Acidjazzed Evening' by Janne Suni.[102] Timbaland, a known user of the Elektron SidStation, a device which is capable of playing back SID files, appears to have muted the SID channel that contains the drums and bass sounds of 'Acidjazz Evening', replacing them with his own sonic elements that play on top of the rapid arpeggios and synth line that are audible on the SID's second and third channels. When 'Do It' was released, neither Gallefoss nor Suni were informed or offered any kind of credit. This may be down to the fact that while a sample clearance procedure is the norm in advance of a commercial track's release, 'Do It' does not feature a 'sample' as such; the sounds that Timbaland appropriated did not exist on a copyrighted sound recording – they could only be played through the reading of SID data that had been released as a

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[99] Examples of such releases include 'Antarctic Burial' and 'Obscure Alcopops', on which I loop and chop sampled drum breaks to create approximations of genre styles like drum and bass and big beat.
Mibri, *Antarctic Burial* (Atlantis, Proxima, 2020).
Mibri, *Obscure Alcopops* (Atlantis, MultiStyle Labs, Proxima, 2020).
[100] Nelly Furtado, 'Do It', (Geffen Records, Mosley Music Group, 2007).
[101] The SID file Acid_Jazz.sid features on the Commodore 64 'diskmag' *Vandalism News #39*.
Onslaught, Vandalism News Staff, Wrath Designs, *Vandalism News #39* (Onslaught, Vandalism News Staff, Wrath Designs, 2002).
[102] The MOD file mod.acidjazzed_evening features on the Amiga music collection *Save Da Vinyl 28*.
MadWizards, *Save Da Vinyl 28* (MadWizards, 2000).

non-commercial, esoteric creative endeavour.[103] While this case caused an unlikely and unfortunate animosity between the worlds of hip hop-related production and the demoscene,[104] I believe that there is much creative potential in the idea that musical techniques and aesthetics associated with video games and the demoscene can be channelled into hip hop beatmaking practice in a more exploratory way.

As I explicated in my article 'Play on Any Platform: Between Hip-Hop Beatmaking and Video Games', my beatmaking concept of harnessing video games technology is not entirely without precedents. The Sony PlayStation software *Music 2000* is not a game as such, but a music production tool that takes the form of a sequencer with a built-in library of audio samples and patterns.[105] Affirming the program's surprisingly broad functionality and ease of use, the British artist Dizzee Rascal states that it was through *Music 2000* that he learned the basics of making beats, guided by his efforts to emulate the sound of UK garage music and the production style of the Neptunes.[106] I suggest that by operating the software using the PlayStation's controller, *Music 2000*'s players can be seen as signifyin(g) on the word 'play', layering two simultaneous meanings of the word to illuminate the joy that can be found in exploratory musical practice, without necessarily aiming to adhere to fixed conventions in established styles.[107] I also found that beatmakers have mined audio from video game soundtracks for novel samples; the beat on the 1998 Jay-Z track 'Money, Cash, Hoes', produced by Swizz Beats, samples a tune from the Sega Mega Drive conversion of the 1989 arcade hit *Golden Axe*, capturing the bright timbres coming from the system's YM2612 sound chip in order to cut through

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[103] Another example of sound derived from a SID tune featuring on a beat can be heard in the 2013 Run The Jewels track '36" Chain', which makes extensive use of an arpeggiated chord taken from the tune '10 Reefers in a Plastic Bag' by Randall, released as part the *10 Years HVSC* music collection for the Commodore 64.
Run The Jewels, '36" Chain', ([adult swim], 2013).
HVSC Crew, *10 Years HVSC* (HVSC Crew, 2006).
[104] Timbaland dismissed the controversy while mistakenly claiming that he borrowed the sound from a video game rather than a demoscene release.
'Timbaland interviewed on "Elliot in the Morning", 2007-02-02', *Demotopia*, 2016,
http://files.zxdemo.org/extra/timbaland_radio_transcript.txt (16th September, 2019).
[105] Codemasters Software Company Limited, *Music 2000*, (Liverpool: Jester Interactive Publishing, 1999).
[106] 'Dizzee Rascal and Rosenberg discuss the history of grime, Skepta, and the whole UK scene', *YouTube*, 2016, https://youtu.be/-8dOAYpWass, (19th June 2017).
[107] Bridgewater, 'Play on Any Platform', 64-65.

and contrast with the track's more textural and bass-heavy elements.[108] In another example, the track 'Proto Culture' by Del the Funky Homosapien featuring Khaos Unique (who also produced the beat) samples a tune from Capcom's 1994 arcade fighting game *Darkstalkers: The Night Warriors*.[109] This, I argue, constitutes a special form of crate-digging, involving the seeking of previously unsampled video games instead of previously unsampled records to flaunt the artists' resourcefulness and originality.[110] Unlike Jay-Z's 'Money, Cash, Hoes' which does not address video games in its lyrics, 'Proto Culture' sees Del and Khaos rhyming about their shared love of obscure titles, apparently emboldened by the beat's *hiphophification* of Capcom's cult arcade game as an elegant melodic fragment supported by a heavily syncopated bass line from the game's tune 'Morrigan Winning' is looped to instigate a jaunty groove that coaxes continually shifting flows and rhyme schemes out of the two MCs.[111] In Chapter 6, I will detail how I advanced from my awareness of these cited uses of video game technology in hip hop music by exploring the connection further through my own beatmaking practice, showing how beatmaking's intrinsic signifyin(g) on technology – turning technological devices that were intended for consumption into devices for creative production – can be pursued by probing 'retro' software and hardware for new musical materials.

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[108] Jay-Z, 'Money, Cash, Hoes', *Vol. 2... Hard Knock Life* (Roc-A-Fella Records, 1998).
Team Shinobi, *Golden Axe* (San Francisco, CA: Sega of America, Inc., 1989).
Bridgewater, 'Play on Any Platform', 61.
[109] Del The Funky Homosapien, 'Proto Culture', *Both Sides Of The Brain* (Hiero Imperium, 2000).
Capcom Co., Ltd., *Darkstalkers: The Night Warriors* (Osaka: Capcom Co., Ltd., 1994).
[110] Bridgewater, 'Play on Any Platform', 62.
[111] Del The Funky Homosapien, 'Proto Culture'.
Capcom Co., Ltd., *Darkstalkers*.

Chapter 5 – Region-specific Styles

Welcome to the land where it just don't stop
Trunks pop, tops drop, and the front end hop
Paint flop, screens on, acting bad in the zone
Yeah it's on, riding chrome, balling at my home.[1]

Hip Hop and Place

The assumption that it is necessary to consider the place from which a certain musical style emerged if one is to study the musical style itself is commonplace in both music journalism and scholarship. The dialectical condition that binds together grassroots level musical participation and the workings of the culture industry is instrumental in how music exists within and spreads across a place, as John Connell and Chris Gibson highlight: '[the] tension between music as a commodified product of an industry with high levels of corporate interest, and simultaneously as an arena of cultural meaning'.[2] This dualism also sees the 'local' contrast with the 'global', where the former can be associated with grassroots music-making. Expanding on this, John Fiske contends:

> A localizing text is one which confines itself to a specific social formation, and functions to identify the communal identity of that formation for its own members. It is a "local representation" and its power, which may be considerable, works to establish control over its own social terrain, to defend its boundaries, sometimes vigorously, against outside forces, but not to take over other social formations and their territory.[3]

Underground hip hop culture is 'local' in that it does not necessarily seek to reach beyond its locale, but tasks itself with representing its community. Nevertheless, an underground hip hop style may be recalibrated in order to operate in a more 'global' musical marketplace by the imperialising power of the culture industry's campaigns of appropriation.

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[1] Fat Pat, 'Tops Drop', *Ghetto Dreams* (Wreckshop Records, 1998).
[2] John Connell and Chris Gibson, *Sound Tracks: Popular music, identity and place* (London: Routledge, 2003), 6.
[3] John Fiske, *Power Plays, Power Works* (London: Verso, 1993), 147.

After the genre of hip hop was formalised in the wake of the culture's incubation in the South Bronx, numerous new scenes from cities across America materialised that nurtured their own localised versions of hip hop music with stylistic quirks coloured by local geographical factors. In this regard, hip hop offers an example of glocalization, a portmanteau of 'global' and 'local' that describes a dialectical synthesis in that, as Connell and Gibson note, they: 'happen simultaneously, not as a mere coincidence, but often as part of a formal contradiction'.[4] Although 'real' hip hop music can be posited as that which is not produced for chiefly commercial reasons, and mainstream hip hop might be considered bereft of any traces of the exciting rawness that made the culture so magnetic to young people in the first place, these opposites are nevertheless interdependent; the global makes the local tenable and vice-versa.

If we are to accept that musical styles develop by way of political and economic influences, then the pursuance of a kind of music geography cannot be limited to basic cartography, that is, the design of maps that attempt to show where styles supposedly belong.[5] In a critique of maps and lists found in the 1996 textbook *Human Geography* that attempted to catalogue North American folk musics, Connell and Gibson argue that they are unsuccessful for their dry functionalism and fixity:

> Other than indicating the role of migration and diffusion in the creation of musical style, regions merely froze contemporary culture into a mythical but indeterminate past and sought to create and stabilise authenticity.[6]

Hence, I recognise that the beat styles I address in this chapter, which are widely understood to be particular to region-specific subgenres, emerged as a result of hip hop being perennially in a state of flux. The elements that comprise a certain style are borrowed from other existing region-specific styles and shaped by the technological affordances that the beatmakers had at their disposal while the style was in its infancy. With this in mind, to 'place' a style in a way that aligns it with one single place would be ruinously simplistic; Andrew Leyshon, David Matless, and George Revill state that: 'The assumption that to place rap is to explain it risks denying the mobility, mutability, and

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[4] Connell and Gibson, *Sound Tracks*, 17.
[5] Ibid., 13.
[6] Ibid., 33.

global mediation of musical forms'.[7] The 'global' character of hip hop styles, a consequence of the culture's commercialisation, sustains hip hop's status as an innovational form of popular music because it facilitates the transportation of musical ideas and thus the development of new local flavours from existing tropes.

Reflecting on his musical upbringing, the contemporary Detroit MC Danny Brown notes that he was familiar with Detroit techno music before he discovered hip hop:

> as a kid, if we went to a house party, they wasn't playing no rap songs. They was playing […] Model 500, stuff like that […] And even just being on the radio, you get the little mix shows. They didn't play rap, they played that [techno]. And even if they did play a popular rap song in the club, they still was speeding it up to like 140 bpm. So, maybe that's our heart pace, that's our heartbeat — 140 bpm. I like my music fast. I know that much.[8]

While Brown is not a beatmaker, his reputation as a recording artist who insists on having a significant degree of input in the creative direction of his albums is justified on tracks like the Skywlkr-produced 'Dip' from the 2013 album *Old*. Playing at Brown's favoured 140 bpm, this track's beat mixes disjointed, almost pointillistic analogue synth figures with forceful TR-808 drums to create a coldly futuristic electronic sound reminiscent of 1980s Detroit techno while the song's hooks interpolate phrases taken from a pair of hip hop club staples – 'Da' Dip' by the Atlanta bass music producer Freak Nasty and 'Ni**as in Paris' by Jay Z and Kanye West.[9] Brown's layerings of hip hop eras and electronic styles beyond hip hop show that the latent networks of influences in hip hop beatmaking can be convoluted, but examining the work of artists who are exemplars of region-specific styles, influenced by local geographical factors, can yield valuable insights.

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[7] Andrew Leyshon, David Matless, and George Revill, 'Introduction: Music, Space, and the Production of Place' in Leyshon, Andrew, Matless, David & Revill, George, (eds.), *The Place of Music* (New York: The Guilford Press, 1998), 1-30 (19).

[8] Ali Shaheed Muhammad and Frannie Kelley, ''Putting The Pill In The Pudding': An Interview With Danny Brown', *Microphone Check : NPR*, 2014, http://www.npr.org/sections/microphonecheck/2014/01/29/265730068/putting-the-pill-in-the-pudding-an-interview-with-danny-brown (16th June, 2017).

[9] Danny Brown, 'Dip', *Old* (Fool's Gold Records, 2013).
Freak Nasty, 'Da' Dip' (Triad Records, 1996).
Jay Z & Kanye West, 'Ni**as in Paris', *Watch The Throne* (Rock-A-Fella Records, 2011).

NYC: Early hip hop, First Golden Age, Second Golden Age

During hip hop culture's infancy in the South Bronx, the most salient human geographical aspect was ghettoization based on race. Douglas S. Massey and Nancy A. Denton, justifying the title of their book *American Apartheid: Segregation and the Making of the Underclass* and their use of the word 'apartheid' in general, contend that the creation and continued existence of urban America's black ghettos is a direct consequence of starkly racist administrative policies:

> The segregation of American blacks was no historical accident; it was brought about by actions and practices that had the passive acceptance, if not the active support, of most whites in the United States. Although America's apartheid may not be rooted in the legal structures of its South African relative, it is no less effective in perpetuating racial inequality, and whites are no less culpable for the socioeconomic deprivation that results.[10]

By analysing data pertaining to isolation indices in American cities in 1970 and 1980, Massey and Denton show how this unjust structure was allowed to exist even as racist discrimination was criminalised and there was a purported 'easing of white racial hostility',[11] evidencing a malevolent example of cultural exnomination where the predominantly white ruling class absolved themselves of the blight of racism while simultaneously perpetuating a particularly destructive and widespread manifestation of it. This could be seen in the practice of redlining, where banks would refuse to grant loans to black citizens like they would to white citizens, preventing black citizens from living in more habitable accommodation than what was available in the crumbling ghettos or establish a business; as Massey and Nancy note: 'In practice, the ideal of 'free enterprise' was not extended to black Americans'.[12] The resultant segregation meant urban America's blacks were forced to live in areas subject to a plethora of ills including but not limited to joblessness, dependence on welfare, and ineffectual education.[13]

The devastation of the South Bronx in particular was the result of a campaign of 'urban renewal', a euphemism for slum clearance that was initiated in the 1950s to

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[10] Douglas S. Massey and Nancy A. Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, MA: Harvard University Press, 1993), 15.
[11] Ibid., 66.
[12] Ibid., 50-51.
[13] Ibid., 2.

accommodate the construction of the Cross-Bronx Expressway through the heart of the area as planned by the prominent Republican public official Robert Moses. This project, which Jeff Chang describes as an act of large-scale 'environmental violence',[14] caused a massive displacement of the South Bronx's residents and led to degradation of already-decayed residential properties in the 1970s as landlords were discouraged from maintaining them properly, instead being more prepared to see the buildings burn down in the area's arson epidemic so that they might receive insurance payouts. The influx of poor and marginalised people of colour into the slums of the South Bronx stoked racial tensions that, as Chang argues, worked as the catalyst for the formation of New York City's most notorious street gangs:

> When African-American, Afro-Caribbean, and Latino families moved into formerly Jewish, Irish, and Italian neighborhoods, white youth gangs preyed on the new arrivals in schoolyard beatdowns and running street battles. The Black and brown youths formed gangs, first in self-defense, then sometimes for power, sometimes for kicks.[15]

The significance of these black and Latino street gangs cannot be overstated; Bronx-based live music promoter and venue owner Arthur ('Art') Armstrong, explains:

> Rap was territorial. It came from the gang wars; I don't know if a lot of people know that many of the rappers came from the gang wars of the '70s. Some became DJs, MCs; some became security. So it melted over into rap music, protecting their territory.[16]

At this point I wish to reiterate that the vital and vibrant vehicle of expression that is hip hop emerged *despite* state violence, not *because* of it; to argue for the latter would be to overlook or otherwise outright deny the intrepid creative agencies of hip hop's practitioners. Still, the aggressively competitive hustler mindsets of gangs like the Black Spades and Savage Nomads can be found in the 'territorial' rivalries between crews like the Cold Crush Brothers and the Fantastic Romantic 5, breathing life into the forsaken public spaces of New York City's ghettos through repeating breaks and braggadocio-laden rhymes blasted on powerful sound systems.

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[14] Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation* (London: Ebury Press, 2007), 10-11.
[15] Ibid., 12.
[16] Jim Fricke, Charlie Ahearn, and Nelson George, *Yes, Yes, Y'all: The Experience Music Project Oral History of Hip Hop's First Decade* (Boston, MA: Da Capo Press, 2002), 5.

Before examining the development of New York City's beat styles from hip hop culture's nascent stage onwards, it should be noted that the practices – or 'elements' – of DJing, MCing, B-Boying, and graffiti were not considered to exist as part of the same movement until New York's 'downtown' scene presented them together at live events in the wake of rap music becoming a form of recorded popular music.[17] In a sense, downtown New York's enterprises – identifying, codifying, and therefore fixing the previously nebulous, organic, and unnamed hip hop culture – were at odds with what I regard as the culture's intrinsic values of counter-fixity, but they did provide Bronx-based crews with a platform from which they could operate on their own terms, without interference from commercially-minded entities like Sugar Hill Records. From this platform, hip hop's aesthetics, shaped by what Nelson George calls the 'lack of civil control (and concern) that marked New York in the 1970s', contrasting with 'the tightly policed, gentrified, self-congratulatory Big Apple of the '90s',[18] were on display to inform and inspire the culture's subsequent waves.

Although my research is to do with the evolution of hip hop beats from the beginning of hip hop culture onwards, the term, 'beat' did not start being used until hip hop music's DJs/producers operating at an underground level began to make their own records in the mid-1980s. Despite this, I regard the elements that MCs rhymed on in early hip hop music as 'beats', starting with an excerpt of a widely circulated recording from a 1981 live battle between Cold Crush Brothers and the Fantastic Romantic 5 at the club Harlem World, titled '1981, Other Mc's' as it appears on the 1998 reissue released by Slammin' Records.[19] This performance, a part of the Cold Crush Brothers' set with Charlie Chase as their DJ, hinges on the repetition of the introductory section of Cerrone's 'Rocket In The Pocket' from the 1979 live album *In Concert*,[20] which Chase plays at 45 rpm on his turntables instead of the LP's correct speed of 33 rpm, resulting in a tempo of around 92 bpm rather than 68 bpm. The heightened tempo – the product of a subtle act of creative

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[17] Tim Lawrence, *Life and Death on the New York Dance Floor, 1980-1983* (Durham, NC: Duke University Press, 2016), 177.
[18] Fricke, Ahearn, and George, *Yes, Yes, Y'all*, ix.
[19] Cold Crush Brothers, '1981, Other Mc's', *Cold Crush Brothers Vs. Fantastic Romantic 5 Live MC Battles From Harlem World 1981* (Slammin' Records, 1998).
[20] Cerrone, 'Rocket In The Pocket', *In Concert* (CBS, 1979).

technological misuse of an existing musical material – sees the drum pattern play at a pace that was closer to that of the hard funk breaks that early hip hop MCs were adept at rapping on. The looped break comprises a simple beat of relatively busy kick drum activity answered by unnatural, almost alien drum sounds realised by brisk upward guitar bends playing at the same time as the drummer's snare hits. With the record playing at a higher speed, the snare's unnatural quality is exaggerated to make for a sound that resembles the record scratching techniques that by the early 1980s were firmly established as part of hip hop style's sonic signature and that Chase himself uses on the performance to interrupt the MCs' verses with quasi-cadential moments of 'rupture'. Furthermore, the higher speed pitches up the original record's vocal chant of 'got a rock-rocket in the pocket' so that it becomes an extra percussive voice, and the applause from Cerrone's audience becomes a chaotic wash of noise that mirrors the palpable intensity of the group, who, after all, were engaged in a fierce contest with their arch rivals. Although the performance takes the form of a freeform sequence of half-sung rhymes as opposed to a 'song' with a distinct structure, Chase uses a brief section of 'Rocket In The Pocket''s introduction that includes a texture of bass, guitar, and strings to split the routine into two halves, preventing the general flow of the performance from becoming monotonous over its duration and giving the MCs a chance to address the crowd to keep them engaged while preparing for the start of a new routine. Chase's treatment of 'Rocket In The Pocket' is an exemplar of early hip hop live DJing performance for its resourcefulness with only a short section of a single record and the accuracy of its cuts back and forth from one turntable to the other, providing the Cold Crush MCs with a forceful and reliable beat for them to rap on as they try to upstage their rivals.

Fig. 5.1 – Charlie Chase of the Cold Crush Brothers

As hip hop's status as a genre of recorded popular music was accepted by the culture's originators, they sought to sign deals with record labels to keep up with the efforts released by outfits like the Sugarhill Gang. 1984 saw the release of the Cold Crush Brothers single 'Fresh, Wild, Fly And Bold' which deviated from the group's DJ-led live style based on repeating breaks in favour of a studio-produced backing track composed using a drum machine and synthesisers, with only the inclusion of turntable scratching between the rapped verses hinting at Charlie Chase's input.[21] This stylistic shift materialised soon after the successes of singles produced by Russell Simmons and Larry Smith between 1982 and 1984, particularly those by the Cold Crush Brothers' Profile Records labelmates Run-DMC. The sound of these early 1980s singles disillusioned many fans and followers of early hip hop culture, with one of the principal reasons being that their slower, less fluid beats were considered unsuitable for B-boys to dance to. Marley Marl remembers: 'Aw, man, what a disappointment when rap records first came out. I

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[21] Cold Crush Brothers, 'Fresh, Wild, Fly And Bold' (Profile Records, 1984).

was like, "NO! This is not what it is… This is not a great representation of what I was brought up on"',[22] and Ced Gee of the Ultramagnetic MC's explains his frustration with the Cold Crush Brothers for abandoning the well-practiced breaks-oriented style that made them one of the best live hip hop crews operating in the South Bronx:

> I couldn't figure out why the Cold Crush never put down what they was doin' on the streets on wax […] People were tired of the synthetic thing; they wanted the real – the live drums, the live bass guitar, with that old sound to it.[23]

This presented a new wave of underground New York City groups from with an opportunity to become popular by releasing records that revisited and embellished on the original 1970s hip hop style, ushering in what is known as hip hop's 'golden age'.

The most crucial development in 'golden age' hip hop beatmaking was the return to the use of repeating breaks as elemental musical materials, working in conjunction with the programming of patterns of 'chopped' sampled individual drum hits and other short sounds, defining what came to be known in beatmaking as 'boom bap'. In effect, this new standard brought the rugged sound of New York's streets to hip hop records; what had been heard on record previously was the sterile environment of the recording studio, but with the live-ness of repeating breaks and samples from funk and soul records, beatmakers such as the Bomb Squad's Hank Shocklee could channel the noise and violence of a city seemingly at war with itself. Toop describes Shocklee's style on Public Enemy's early records as: 'a ferocious, crowded sound dominated by busy drumbeats and mantric digital sample loops of '70s funk guitars, rock riffs and archaic synthesiser squeals'.[24] Such a maximalist slant, of stacking numerous samples together in cacophonic assemblages, went some way towards emulating the sheer loudness of the sound systems of the South Bronx in the 1970s. This resultant sound, however, can seem somewhat deficient in the dimension of hip hop's aesthetics that is to do with the 'funkiness' that allows for an MC to showcase their vocal dexterity within syncopated rhythms and fleeting pockets of quiet in that there is, throughout Public Enemy's

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[22] Amir Said, *The BeatTips Manual: Beatmaking, the Hip Hop/Rap Music Tradition, and the Common Composer* (Brooklyn, NY: Superchamp Books, 2009), 335.

[23] *Deep Crates 2*, by Jerry Weisfeld, 2007, 64 min. (DVD, Beatdawg Films).

[24] David Toop, *Rap Attack #3* (London: Serpent's Tail, 2000), 176.

landmark album *It Takes A Nation Of Millions To Hold Us Back*, a marked lack of negative space in the saturated mixes of the Bomb Squad's beats – hip hop's trope of layering being exerted to the detriment of its trope of flow.[25] Evidently, flow was more of a priority for Ced Gee, the main beatmaker of the Ultramagnetic MC's, whose 1988 single 'Watch Me Now' features a layering of the 'Amen' break and a rhythm guitar figure sampled from 'Gimme Some More' by the J.B.s.[26] This uncluttered groove is played during the group's verses, leaving ample space in the mid-range frequencies for the MCs to rhyme in and allowing for the polyrhythmic interplay between the break and guitar riff to sustain the beat's flow without being overpowered by any superfluous textural sounds. The groove also features chopped brass hits culled from 'Gimme Some More', acting as a device to punctuate and 'hype' the ends of the MCs' lines, sounding suddenly and then dying quickly before it can interfere with the start of a subsequent line. Moreover, these brass hits are used to anticipate when the track's hook – which adds a sample from 'It's Just Begun' by the Jimmy Castor Bunch – begins.[27] Since the hook does not feature any rapped vocals from the group, comprising instead the phrase 'Watch me now, fill the room' as heard on 'It's Just Begun', the significant thickening of the texture realised through further layering imbues the track with a clearly structure delineated by dynamics without getting in the way of the MCs' flows and lyrics. Here, the economical approach of early live hip hop music from the South Bronx, of an MC rhyming over a break, is revisited, as the technology that allows for multiple sounds to be played in a beat used to compliment the break, not overpower it.

The later stage of New York hip hop's 'golden age', happening in the early 1990s, saw beatmakers furthering the developments made in 'boom bap' programming, the use of repeating breaks, and multi-track layering to compose soundscapes that offered bleak sonic representations of a city that, post-Reaganomics, continued to contain oppressive ghetto environments. On his time living in a ghetto in the borough of Staten Island, RZA

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[25] Public Enemy, *It Takes A Nation Of Millions To Hold Us Back* (Def Jam Recordings, Columbia, CK 44303, 1988).
[26] Ultramagnetic MC's, 'Watch Me Now / Feelin' It' (Next Plateau Records Inc., 1988).
The J.B.s, 'Gimme Some More' (People, 1971).
[27] The Jimmy Castor Bunch, 'It's Just Begun' (Kinetic, 1970).

reflects: 'I now see [life in Staten Island] for what it was: hell – a hell of violence, addiction, misery, and humiliation'.[28] Thus, as he set about assembling the Wu-Tang Clan and deciding on the group's overarching artistic direction, RZA opted not to produce party-oriented tracks made specifically to be played in clubs, but, as he puts it: 'street music, beats that MCs could rap on, beats that would make you wanna rip a hole out of the wall'.[29] RZA's beats aimed to emulate the energy of live 1970s hip hop parties while also seeking a means of catharsis of the Wu-Tang Clan's MCs who had grown up experiencing the continuing poverty of New York City's ghettos. In terms of his musical practice, RZA accomplished this by formulating what can be regarded as a synthesis of the Bomb Squad's dense and violent sample layerings with the consideration for space and flow that characterised the work of groups like the Ultramagnetic MC's, as Simon Reynolds finds:

> Melody is shunned in favour of a frictive mesh of unresolved motifs – a hair-raising horror-movie piano trill, a hair-trigger guitar tic – which interlock to instil suspense and foreboding. Usually, the looped breakbeats don't change, there's no bridges or tempo shifts, which increases the sense of non-narrative limbo.[30]

By the end of 1995 – at which point RZA had produced the Wu-Tang Clan's critically acclaimed debut album and solo records by group members Method Man, Ol' Dirty Bastard, and Raekwon – RZA's beatmaking style, constituted the ultimate manifestation of 'golden age' hip hop production at a time when it became abundantly clear that hip hop music in general was no longer considered to be a genre specific to New York City alone, with West Coast and Southern artists breaking out of local underground scenes and finding commercial success. RZA's style is exemplified by his beat on the GZA track '4th Chamber' from the 1995 album *Liquid Swords*;[31] this track, appearing halfway through the album's duration, made for an unlikely single release for its lack of hook, murky, saturated lower mid-range frequencies, and verses packed with off-kilter vocal flows courtesy of the MCs Ghostface Killah, Killah Priest, RZA, and GZA. The start of the beat is announced by a shrill blast of synth playing in a heavily modulating contour due to the instrument's portmenteau – or 'glide' – function, making for a bracing, unsettling

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[28] The RZA and Chris Norris, *The Tao of Wu* (New York, NY: Riverhead Books, 2009), 3.
[29] Ibid., 11.
[30] Simon Reynolds, *Energy Flash: A Journey Through Rave Music and Dance Culture* (London: Picador, 1998), 324-325.
[31] Genius / GZA, '4th Chamber', *Liquid Swords* (Geffen Records, 1995).

sonic element that clears the sound stage for the subsequent heaviness of RZA's mix. Rhythmically, the beat is very simple, with a sample-based 'boom bap' pattern of two kicks answered by a snare to anchor the textures that RZA introduces to the mix as the track advances – coming and going, sometimes audible simultaneously, sometimes replacing one another, producing a sequence of timbral morphologies existing on both the beat's vertical (layered sounds) and horizontal (development over time) axes. Among these elements is a staccato guitar figure sampled from the 1967 Willie Mitchell track 'Groovin'',[32] a sound that contrasts with the abrasive sustained organ and bass notes to make for a tense sonic dichotomy while also functioning as a supplementary percussive sound playing largely in time with the kicks and snares. To affirm how the beat demonstrates RZA's mastery and artful extension of New York City 'golden age' hip hop aesthetics, subtle moments of 'rupture' materialise as all sounds are cut from the mix for a single beat, replaced with a single organ stab that was also sampled from 'Groovin'', resulting in an uncanny, deconstructed remix version of Mitchell's soul track. For '4th Chamber', RZA composed a beat that repurposed the aesthetics and broad technocultural strategies of early hip hop, albeit making MCs and audiences alike cognisant of New York City life's darkest facets as opposed to facilitating hedonistic escapism.

Although most artists and groups who are associated with 'golden age' hip hop were from New York City and were active between the late 1980s and mid-1990s, the advancements of hip hop's primary aesthetics that this period saw have been detectable in other underground scenes from other corners of the United States, as beatmakers sought to channel the spirit of 'real' hip hop in order to represent their locales. Among the first cities to establish an underground scene with a discernibly 'golden age' flavour was Houston, Texas.

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[32] Willie Mitchell, 'Groovin'', *Solid Soul* (Hi Records, 1967).

Houston: Geto Boys, Screwed Up Click, Screw Music

The city of Houston has been described by some scholars as the model 'free enterprise' city of the United States, supposedly embodying the overarching values of the state of Texas. Identifying Houston's enterprising, libertarian character, Jan Lin ventures:

> An eclectic cast of characters (including heroic pioneers, cowboys, wildcatters, oilmen, and spacemen) in the existing metropolitan cultural iconography have been historically fused in a unifying patina of forward-looking rugged individualism.[33]

This reputation is consistent with one of the city's most striking distinctions – it is the only city in the United States to not have a system of zoning, that is, formalised stratification of land uses (residential, industrial, etc), used on an official level, despite being the fourth largest city in the country by population and with there being numerous attempts at introducing it. These attempts, taking the form of referendums,[34] all failed as a result of the dominant view that the system of zoning would result in, as Igor Vojnovic describes: 'basic violations of private property and personal liberty'.[35] To expand on this opposition to zoning, John F. McDonald finds that:

> It was alleged that zoning will inflate housing costs by limiting the density of housing development, cause urban sprawl and waste energy, create a new bureaucracy that is susceptible to graft and corruption, and promote economic and racial segregation. It was also pointed out that using zoning to restrict churches will undermine freedom of religion![36]

Houston's rejection of zoning might suggest an alignment with American 'classic' liberalism, embodying a distrust of ostensibly unnecessary governmental control and also a tendency which sees that, as Bernard H. Siegan finds: 'the *gemutlichkeit* [warmth, geniality] of garden-city living is simply not shared by all homeowners'.[37] Rather than prioritising the beautification and orderliness of the city, Houston residents have been found to care more about living close to the city's main thoroughfares irrespective of any

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[33] Jan Lin, 'Ethnic Places, Postmodernism, and Urban Change in Houston', *The Sociological Quarterly*, 36/4 (Autumn, 1995), 629-647 (629).
[34] The most recent referendum on the issue, taking place in November 1993, saw a relatively small majority of 52% of voters reject zoning.
John F. McDonald, 'Houston Remains Unzoned', *Land Economics*, 71/1 (February 1995), 137-140 (137).
[35] Igor Vojnovic, 'Laissez-Faire Governance and the Archetype Laissez-Faire City in the USA: Exploring Houston', *Geografiska Annaler. Series B, Human Geography*, 85/1 (2003), 19-38 (19).
[36] McDonald, 'Houston Remains Unzoned', 139.
[37] Bernard H. Siegan, 'Non-Zoning in Houston', *The Journal of Law and Economics*, 13/1 (April 1970), 71-147 (90).

cosmetic or environmental implications; thus, Houston residents prefer the convenience that comes with highly diverse land use and easy access to major roads.

The prioritisation of road infrastructure in Houston's planning contrasts sharply with the planning of New York City, which, historically, has been to do with the construction of high-rise residential blocks and public transport systems. In his 1970 article 'Non-Zoning in Houston', Siegan elucidates:

> Planning for the location of streets and other thoroughfares began at a time when the ownership of the automobile had become common, and most of the city is accessible to other parts by way of major streets and expressways. Traffic appears to be exceedingly well regulated and engineered. Houston does not have a rapid transit system, and the bus system does not provide regular service for many sections […] Accordingly, it is most difficult to compare the physical composition and appearance of Houston, which has tended to grow horizontally, with the larger cities of the North in which vertical growth has been more important; the more appropriate comparisons are with cities that have similarly grown with the automobile.[38]

Since Houston's infrastructure has revolved around motoring, it has more in common with the expansive conurbation of Los Angeles. In turn, the vernacular culture of Houston has been influenced indelibly by the car as both an essential, practical tool in the living of one's life and as a symbolic extension of the self. I seek to demonstrate how Houston's hip hop culture works in tandem with its 'slab' car culture, in a similar way to how Miami bass music worked in tandem with the city's car stereo culture, since, as Justin A. Williams highlights, the subwoofers of custom car stereo systems were able to project frequencies below the 100-200Hz frequency range of road noise in order to allow for tracks to have discernible bass parts while the car is in motion.[39] Furthermore, in Houston, car culture has also played a significant role in the propagation of the media of hip hop, as physical copies of recordings by crews like the Screwed Up Click (S.U.C.) were sold from out the back of artists' and label staffs' cars, and once sold, their sounds would be played loudly from vehicles, like roving broadcasts on the streets, as Williams finds:

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[38] Siegan, 'Non-Zoning in Houston', 73.
[39] Justin A. Williams, *Rhymin' and Stealin': Musical Borrowing in Hip-Hop* (Ann Arbor, MI: The University of Michigan Press, 2014), 77.

> The music can be used for individual driving pleasure or function like a boom box, to accompany and create a space of socialization such as a block party, or it may territorialize (and/or terrorize) the surrounding sonic environment.[40]

This consideration for how amplified sound is harnessed to claim – or otherwise alter – certain spaces relates to the concern of 'representing' a locale which is fundamental to the sensibilities of underground hip hop scenes. Hip hop artists and crews are expected to observe and perform a connection to their cities, and if/when they emerge as commercially viable at a national or perhaps even international level, they find themselves imbuing the broader culture of hip hop with their region-specific tropes. This tendency is detectable in the output of Houston artists, including the first crew from the city to make a significant impression beyond Texas: the Geto Boys.

By 1986, hip hop music occupied a niche in mainstream American popular culture, and this prompted young people around the United States to form their own crews – not necessarily because they felt an affinity with the underground hip hop culture of New York City, but because they saw an chance to become stars like the most prominent rap crews of the time. Discussing the formation of the Geto Boys – originally known as the Ghetto Boys – the group's DJ Ready Red recalls:

> We were tryin' to be commercial. We did what he heard Run[-DMC] and them doin', what we heard the Fat Boys doin'. We was tryin' to be commercial, acceptable, until we found out that that wasn't gonna happen from a Houston-based rap group.[41]

The group's first attempt at a 'commercial' record was the single 'Car Freak', released on the fledgling Houston label Rap-A-Lot Records in 1987.[42] This track, produced by the R&B musician Mikki Bleu, comprises a minimalistic beat predicated on a basic kick and snare pattern that mimics Run-DMC's mid-1980s output, with synthesised basslines and riffs that evidence an obvious bid to create a mix of sounds that would not have sounded out of place on commercial radio alongside pop-funk acts like Cameo and Prince. This style contrasted sharply with that of the contemporaneous 'golden age' New York hip hop outfits who were revisiting and expanding on the aesthetics of 1970s live hip hop culture

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[40] Williams, *Rhymin' and Stealin'*, 76.
[41] Lance Scott Walker, *Houston Rap Tapes* (Los Angeles, CA: Sinecure Books, 2013), 41.
[42] Ghetto Boys, 'Car Freak' (Rap-A-Lot Records, 1987).

in their beats, and only the track's title and lyrical subject matter (cars and women) could offer vague hints at the future direction of Houston hip hop. After the poor critical and commercial reception of the first Ghetto Boys album, 1999's *Making Trouble*,[43] which thoroughly exhausted the limited expressive potential of 'Car Freaks''s production style, the group opted for a more aggressive sound that had more in common with the rawer early hip hop music that DJ Ready Red was engrossed in when he lived in Trenton, New Jersey before relocating to Houston.[44] This followed a trend of former East Coast residents introducing New York City's devices of hip hop to Houston, as the DJs Lonnie Mack, Royal Flush, and Rick Royal had previously brought vital technologies like the Technics SL-1200 turntable to Houston's clubs.[45] The result was the 1989 album *Grip It! On That Other Level*, a record that paired explicit and sometimes jarringly violent rhymes with beats built on hard funk breaks, turning the group's fortunes around and yielding a position on the *Billboard* 200 chart – a coup at the time for an underground hip hop crew from outside New York City.[46] This shift in DJ Ready Red's creative direction as a beatmaker reflected a drive away from chasing trends in hip hop's mainstream manifestations and towards sonically representing Houston, a city that in the late 1980s and early 1990s was plagued by the existence of ghettos despite its manifold differences from New York City.

Writing in 1995, Lin observes Houston's progression across the 20th century in terms of architecture, urban political economy, and policies towards 'ethnic places', happening across periods that he identifies as 'early modernism', 'high modernism', and 'postmodernism'. The period of 'high modernism' saw neighbourhoods that were largely populated by Houston's black residents hit by the construction of new roads in thinly veiled slum clearance programmes reminiscent of the Cross-Bronx Expressway project, but the subsequent 'postmodern' phase saw predominantly black areas like the city's Fourth Ward find special protection and preservation for their historical and cultural

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[43] Ghetto Boys, *Making Trouble* (Rap-A-Lot Records, RAP-100, 1988).
[44] Walker, *Houston Rap Tapes*, 40.
[45] Ibid., 68.
[46] Ghetto Boys, *Grip It! On That Other Level* (Rap-A-Lot Records, RAP-103-2, 1989).

significance.[47] This shift in policy hints at a marked improvement for the city's black residents through an affront to institutional racism, but more recently, Vojnovic has taken a less positive view, finding racial inequality stemming from an overtly neoliberal political environment:

> Despite claims by Houston leaders regarding the City's laissez-faire philosophy, much of the City's economic success was made possible by active government involvement in Houston's economy. While there is a disinterest in welfare programs, as evident from the local public finances, public intervention in economic development has been significant. What also becomes apparent from Houston's governance strategy, however, is that even the benefits of public intervention in economic development are not equally distributed among the City's residents.[48]

Here, it is claimed that Houston's reputation as an enterprising Texan city that has succeeded by championing economic self-sufficiency does not reflect its reality, and the resources acquired have not been used to help Houston's marginalised people, resulting in 26% of the city's population living below the poverty line – roughly twice the national average.[49] Moreover, Lin's finding that the city's efforts protect its 'ethnic places' has been beneficial to the black population is cast into doubt by Vojnovic's argument that a trend of rapid gentrification swept such areas in the 1990s:

> Houston's revitalization pressures have resulted in a considerable displacement of the City's lower income groups, particularly the black population, whose historical neighborhoods were located around the downtown. For instance, between 1990 and 2000, the black population within the Fourth Ward decreased by over 55% while the white population had increased by over 267%.[50]

This phenomenon is recognised by Minister Robert Muhammad, a community leader who has complained of funds being allocated to the development of new properties rather than to the repair of existing streets in Houston's wards, and regards this to be a consequence of a continuing institutional bias against black communities.[51] Thus, the presence of black ghettos persisted in Houston as they did in New York City, prompting the city's hip hop sound, led by the Geto Boys, to assume a darker tone.

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[47] Lin, 'Ethnic Places, Postmodernism, and Urban Change in Houston', 632.
[48] Vojnovic, 'Laissez-Faire Governance and the Archetype Laissez-Faire City in the USA', 34.
[49] Ibid., 35.
[50] Ibid.
[51] Walker, *Houston Rap Tapes*, 118-119.

On the strength of the Ghetto Boys' *Grip It! On That Other Level*, Rick Rubin – already widely known for his mixing work on releases by LL Cool J, Beastie Boys, and Public Enemy – got involved with the group, suggesting the name change from 'Ghetto' to 'Geto' and supervising the production of more polished mixes for a new version of *Grip It!...*, re-titled *The Geto Boys*.[52] However, DJ Ready Red claims that Rubin did not make any adjustments to the tracks' beats, a fact that impressed the staff at the label Def American.[53] Ready Red's ability to make rugged beats that could stand up alongside those of records that helped to define New York City hip hop's 'golden age' without Rubin's input demonstrated his immersion in hip hop culture and shrewd understanding of what the Geto Boys needed to do to reposition themselves as a group that could express the frustration felt by Houston's young black residents at the start of the 1990s. Opening *The Geto Boys* is 'F # @ *' Em', one of two tracks produced after the original release of *Grip It!...*, and among the most bracing of the group's discography for its impassioned vocal performances and multifaceted beat.[54] The main loop of much of the beat comprises a sample of the main groove from the Isaac Hayes instrumental track 'Breakthrough' in its entirety as opposed to an 'open' break of a single instrument's part.[55] This loop's guitar and bass figure provides the beat's mid-range and bass frequencies while its syncopated drum beat, which is reinforced in the mix by a layered drum machine figure, delivers a lilting swagger. A sample of the same unusual guitar-plus-snare hit from Cerrone's 'Rocket In The Pocket' that the Cold Crush Brothers used so effectively in their 1981 battle with the Fantastic Romantic 5 features at cadential points of the group's verses as the main loop is temporarily cut from the mix.[56] These interruptions serve to stress certain 'punchline' rhymes in the track's lyrics; these moments amount to a examples of 'rupture', sonic aggressions towards regularity that imbue the track with a chaotic quality. Another likeness to the Cold Crush Brothers' 1981 battle performance can be found at the top end of 'F # @ *' Em''s frequency range, where a steady, canopied noise sound – most likely sampled from a recording of an audience cheering at a concert, possibly the one on 'Rocket In The Pocket' – can be heard

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[52] Geto Boys, *The Geto Boys* (Def American Recordings, Rap-A-Lot Records, DEF 24306, 1990).
[53] Walker, *Houston Rap Tapes*, 41.
[54] Geto Boys, 'F # @ *' Em', *The Geto Boys* (Def American Recordings, Rap-A-Lot Records, 1990).
[55] Isaac Hayes, 'Breakthrough', *Truck Turner (Original Soundtrack)* (Enterprise, 1974).
[56] Cerrone, 'Rocket In The Pocket', In Concert (CBS, 1979).

throughout the track (barring the aforementioned 'ruptures'), though it is most noticeable when the Hayes loop is cut from the mix.[57] This additional noisy element acts as a 'glue' sound to fill the space between the beat's elements, and heightens the beat's agitated zeal to compliment the antagonism of the group's rhymes. Overall, the beat of 'F # @ *' Em' demonstrates Ready Red's emphasis on his role as a 'DJ' rather than as a 'producer', recognising that the figure of the DJ was pivotal to the original hip hop culture from New York City:

> The ones I saw comin' up before me, the original pioneers of this craft – the Kool Hercs, your Bambaataas, your Flashes, your Theodores, your Red Alerts […] all those cats – those are the ones that you're patterning yourself after […] Every time I put the headphones on, cue up the record, I'm doin' an homage to all the DJs from the past who came up with that.[58]

Through their reproduction of the aesthetics of 1970s and 1980s New York City's underground hip hop styles, the Geto Boys established Houston as a credible hip hop city, setting the stage for a new wave of local musicians to develop a style with a more distinctive character.

Ready Red's East Coast-informed musical sensibilities made him something of an anomaly in Houston, even though it was he who produced the tracks that enabled a Houston hip hop group to find a place on the national stage for the first time. Where Ready Red's beats hinged on looping breaks and chopped samples, most other hip hop musicians from 1990s Houston had a more conventional musical training, as Houston-based MC Big DeMo explains:

> What helped it [Houston-based groups producing their own records] was these band guys. The guys that were in the band. These guys that played the piano. These guys helped music down here in Houston – helped hip-hop grow, because they knew about tracks. They knew about musical notes. They knew how to read music. They knew how to play anything with keys. They knew that stuff. So, you grab those guys, you grab the dude that played the piano or organ in the church, 'cause you say, "Oh, I think I need them". So you grab him and you

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[57] My use of the terms 'canopied' and 'noise' is informed by Denis Smalley's technical framework of spectromorphology, a device used in the critical listening of sounds in electroacoustic music. 'Canopied' refers to the top layer of Smalley's 'pitch-space frame', and 'noise' denotes a sonic profile where frequencies are so densely compressed that no one single prominent frequency is intelligible.
Denis Smalley, 'Spectro-morphology and Structuring Processes' in Emmerson, Simon, (ed.), *The Language of Electroacoustic Music* (London: The Macmillan Press, 1986), 61-93.
[58] Walker, *Houston Rap Tapes*, 45.

put him on your team, and then you take the guy that plays that one drum in the band. You grab him, and you pull him with you, and now you got you a production crew.[59]

This kind of background, involving composing arrangements with a consideration for melody rather than making beats with a more direct, concrete application of technology, saw Houston hip hop's developing sound find more in common with West Coast styles like G-funk. This preference is attributed to Houston's 'slab' car culture (where a 'slab' is a brightly coloured and heavily customised classic American car), itself a consequence of the city's car-oriented planning; beats composed using live instruments and synthesisers recorded in high fidelity as opposed to degraded samples were, according to Big DeMo, thought to sound better on car stereo systems, and this was more important to Houston's hip hop community than recognising and adhering to the 'roots' of the culture.[60] In 1997 the influential weekly publication *Houston Press* found that 'slab' drivers practiced a kind of automotive dance on the city's roads through moves like 'swangin'' and 'bangin'', done to the beats of 1990s Houston hip hop tracks: 'the swangin' a gentle "S" movement in time to the music, and the bangin' a more violent back and forth swerve with the steering wheel that shakes the car, and its passengers, at hard angles'.[61] This trend provided the title for the track 'Swangin' and Bangin'' by the Houston-based artist E.S.G. of the crew S.U.C., on which E.S.G. rhymes about his lifestyle in Houston and the features of his customised Cadillac.[62] Playing at a languid 75 bpm, the track's beat fits the ideal of the Houston hip hop sound as described by Big DeMo for its especially deep bass lines and TR-808 kick drum hits, which are answered by crisp TR-808 snare sounds while the hi-hat marks time by playing in sixteenth notes. The presence of a synthesised piano figure playing extended chords followed by a light melodic lick demonstrates proficiency in common practice music that came with being among Houston's 'band guys', and the hook, taking the form of a simple synthesised flute riff, completes a decidedly easy-going feel that was intended to compliment leisurely drives around Houston, entirely at odds with both the dark, grimy sounds of contemporaneous New York City hip hop and the elevated sonic energy of club music offshoots like Miami

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[59] Walker, *Houston Rap Tapes*, 155.
[60] Ibid., 154.
[61] Megan Halverson, 'Swangin' and Bangin' … and getting to that other level with the disciples of screw', *Houston Press*, 1997, http://www.houstonpress.com/news/swangin-and-bangin-and-getting-to-that-other-level-with-the-disciples-of-screw-6574814 (17th January, 2017).
[62] E.S.G., 'Swangin' and Bangin'', *Sailin' Da South* (Perrion Entertainment, Priority Records, 1995).

bass. This sound is typical of tracks by artists from the S.U.C., but in their regular, unedited form, these tracks do not constitute the sound that Houston hip hop is best known for. To find the essence of the city's underground hip hop culture, one should look to the leader of the S.U.C. – DJ Screw.

Fig. 5.2 – E.S.G. in the music video for 'Swangin' and Bangin''

DJ Screw's output, widely referred to as 'Screw music', was produced through a DJing style called 'chopped and screwed', entailing mixes of local and national hip hop records playing at slower speeds and subjected to a variety of turntablism techniques and effects. Since this kind of media was not appropriate for radio play, even on local stations that purportedly supported Houston's underground hip hop scene, Screw's mixes were distributed via cassette tapes that would be played loudly from the car stereo systems of 'slabs' to express pride in being from the area. Reflecting on how the output of DJ Screw became the associated music of 'slab' car culture, Meshah Hawkins – widow of the late Houston rapper Big Hawk – states: 'you can't ride slab and not bang the Screw, you know what I'm sayin'? You not ridin' slab if you ain't bangin' Screw. It just goes hand in hand'.[63]

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[63] Walker, *Houston Rap Tapes*, 231.

Screw's 'chopped and screwed' style was not entirely of his own design, but was the combination of two innovations that were introduced to the Houston party scene by the DJs Michael Price and Darryl Scott; the former was known for 'screwing' records, which entailed intentionally playing them at slower speeds,[64] while the latter devised the technique of 'chopping', where the DJ's crossfader moves from one turntable to another with the same record, but the turntable they are moving to is playing the record one beat behind, resulting in a stuttering effect, before switching back to the first turntable playing at the original, correct point in time.[65] Although Scott explains that he would 'chop' to a turntable playing a beat behind, to listen to a Screw tape is to discover that Screw's version of the technique was slightly different in that the second turntable would be playing a beat ahead so that an unnatural effect of time temporarily jumping ahead is achieved, even as the prevailing feeling in his sets is of time moving in slow motion due to the artificially reduced tempo of 'screwing'. The key detail about Screw's adopting of Price's and Scott's DJing approaches is that while the earliest slowed-down hip hop of Houston existed as live party music, not dissimilar to the culture of early hip hop in the South Bronx of the 1970s, Screw's take on it was recorded, and effectively became a method of beatmaking as he had local MCs improvise freestyle rhymes over his sets, further problematising the contested distinction between the practices of DJing and beatmaking in underground hip hop culture. An example of this can be heard on the Screw tape *Leanin' On A Switch*, on which the S.U.C. MCs Lil Keke and Big Pokey trade freestyle verses over slowed-down looping G-funk beats for long stretches of time.[66] Big DeMo, describing Screw's process of making his Screw tapes, states that Screw recorded his sets at regular speed, with the slowing-down taking place afterwards,[67] so that 'chopped and screwed' means 'chopped *then* screwed' more specifically.

The fact that Screw's mixes were distributed on cassette tape is significant; many of his early releases were produced as personalised mixes for his friends, as DJ Chill enthuses:

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[64] Walker, *Houston Rap Tapes*, 13.
[65] Ibid., 53.
[66] DJ Screw, *Leanin' On A Switch* (Screwed Up Records, 1996).
[67] Walker, *Houston Rap Tapes*, 151.

> Man, I remember times when we would make a list and he would make that tape, that was like having a personalized shirt! […] That was like havin' your own slab, your own car, your own car the way *you* want it to be. The way you wanna look it. Your own *paint* job. That was of *value*.[68]

Thus, the Screw tape carried a substantial degree of (sub)cultural capital, even while it was cheap, durable, and easily attainable from the front door of Screw's home (before the establishment of the store Screwed Up Tapes & Records). The highly portable nature of the cassette tape saw the format remain highly popular with hip hop fans long into the 1990s, supporting John Connell and Chris Gibson's observation that:

> Cassette technology was both an agent of homogeneity and standardisation, but at the same time it was a catalyst for decentralisation, democratisation and the emergence of regional and local musical styles.[69]

The cassette tape's character amounts to the possibility for it to be an agent of both fixity and fluidity in music; it is through a fluidity that Screw tapes operated to disseminate the voices of the MCs of the S.U.C., as the MC Shorty Mac likens the series of tapes to regular (at least in the sense meaning routine and scheduled) local radio broadcasts,[70] albeit an alternative and fiercely independent one. The Screw tape *3 'N The Mornin' (Part Two)* (also released on CD by Bigtyme Recordz in 1995), is exemplary for its showcasing of several S.U.C. artists and extensive use of the 'chopped and screwed' style's techniques.[71] In the broader environment of 1990s hip hop across the United States, where DJs/beatmakers had clawed back some star status that they had previously lost to rappers in the immediate aftermath of the earliest rap records, Screw was unusual for being a leader of a local underground scene while simultaneously not contributing 'original' tracks in his capacity as a 'producer', as *Houston Press* reflects: '3 N' Tha Mornin' [(Part Two)] isn't theoretically about DJ Screw, sure, but that's because no Screw tape was ever singularly about him. That's sort of the point, what made him so transcendent'.[72]

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[68] Walker, *Houston Rap Tapes*, 95.
[69] Connell and Gibson, *Sound Tracks*, 58.
[70] Walker, *Houston Rap Tapes*, 27.
[71] DJ Screw, *3 'N The Mornin' (Part Two)* (Bigtyme Recordz, BTR-1130, 1995).
[72] Shea Serrano, 'The H-Town Countdown, No. 13: DJ Screw's 3 N' Tha Mornin' Pt. 2 (Blue)', *Houston Press*, 2009, https://www.houstonpress.com/music/the-h-town-countdown-no-13-dj-screws-3-n-tha-mornin-pt-2-blue-6757896 (20th November, 2019).

As Screw's DJing drew from the commercial releases of S.U.C. artists, placing their tracks alongside those of the national hip hop stars of the time (though mostly West Coast artists), S.U.C. artists reciprocated by drawing from Screw's production approach to assert their affinity with Houston's underground hip hop culture. This is evident on E.S.G.'s album *Sailin' Da South*, which features both a regular mix and a slowed-down, 'Screwed' version of the track 'Swangin' and Bangin''.[73] It can be assumed that the slowed-down version is labelled as 'Screwed' as opposed to 'Chopped and Screwed' because it does not feature any 'chopping' – it is simply the very same track slowed down. Thus, the 'Screwed' version cannot be considered to possess the compelling qualities of Screw's output as a DJ since it lacks his improvisatory turntablist impulses, the gritty, quasi-lo-fi sound quality of his equipment and his chosen cassette format, and the 'liveness' of the ad libs and shout-outs from himself and members of the S.U.C. hanging out at his home during recording. As if to rectify this, Screw features 'Swangin' and Bangin'' in the Screw tape *Codeine Fiend*, sustaining it for twelve minutes by 'screwing' the tempo, 'chopping' E.S.G.'s verses, and using an instrumental mix to extend and develop the track.[74] The musical result is an uncanny one – the familiar taking an unfamiliar and otherworldly form – and an extreme realisation of hip hop's core aesthetic devices of flow, rupture, and layering through a method that at once simplifies and complicates what can be meant by 'production' for its implicit suggestion that Screw music can be regarded as a form of composition, and therefore, in the context of hip hop, a form of beatmaking.

Before his death in 2000, Screw's influence on Houston's underground hip hop scene saw him become a kind of 'griot', that is, not only a musical leader but also as an inspirational, talismanic figure for a whole community, as Shorty Mac recalls:

> this dude changed a lot of people's lives. By listenin' to his tapes. I mean, I done seen dudes come up there that's been hustlin' and they goin', "Man, I'm fittin' to go to college…" and like, "Man, I'm listenin' to this tape, man, Screw you got me thinkin'…" I'm like, "Wow, this is serious"'.[75]

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[73] E.S.G., 'Swangin' and Bangin' Screwed', *Sailin' Da South* (Perrion Entertainment, Priority Records, 1995).
[74] DJ Screw, 'Swanging and Banging', *Diary Of The Originator : Chapter 49 (Codeine Fiend)* (Screwed Up Records, 2004).
[75] Walker, *Houston Rap Tapes*, 23.

Due to his eminence, Screw's innovations were prominent enough to spread beyond Texas, introducing a new advancement on hip hop's aesthetics to the rest of the United States. The fluidity of hip hop music's geography facilitated the spread of Screw music's sound in a way comparable to how the sound of New York City's early underground hip hop reached Houston by way of DJ Ready Red's relocating. G-Dash, the owner of the Houston-based record label Swishahouse, remembers: 'as the years went by, our mixtapes was growin' and growin' because of the colleges and military. You know these kids leave to go to school in California, New York, whatever'.[76] Through the mobility of tapes, and without the need for a concerted, prolonged marketing program, Houston's style spread; Big DeMo corroborates G-Dash's recollection, claiming that New Orleans hip hop fans in particular were traveling to Screw's home in Houston and buying large numbers of Screw tapes, and the New Orleans hip hop pioneer Master P was influenced by the scene during his time as a student at the University of Houston.[77] Hence, to pivot from Houston, I will close my focus on region-specific styles with an account of New Orleans hip hop's history.

New Orleans: No Limit, Bounce, Cash Money

Through its prominence as a port town, New Orleans is celebrated for its historical mixing of disparate cultures; this in turn has seen it become recognised as the origin of a family of musics termed 'jazz'. In his seminal book on Black American music *Blues People*, Amiri Baraka suggests that the musical attributes of early New Orleans jazz have their roots in religious practice:

> The first instrumental voicings of New Orleans jazz seem to have come from the arrangement of the singing voices in the early Negro churches, as well as the models for the "riffs" and "breaks" of later jazz music.[78]

The austerity of the early black American church, lacking in instruments and printed manuscripts, is deemed to have nurtured a culture of resourcefulness that, as John Mowitt finds, included using the physical construction of the church itself as a percussion

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[76] Walker, *Houston Rap Tapes*, 250.
[77] Ibid., 155.
[78] Amiri Baraka, *Blues People* (Edinburgh: Payback Press, 1995), 47.

instrument, with congregations beating the floor in lieu of drums, which blacks across the United States were prohibited from playing prior to slavery's abolition.[79] However, Mowitt also alludes to the fact that New Orleans did not adhere to this racist ban.[80] Such relative freedom in musical activity allowed blacks in New Orleans to develop a music of their own, subject to an overarching dialectical condition in that their practices were riff-based and communal while also allowing for improvisatory bursts of individual expression. The reasons for this freedom being tolerated can be found in the peculiarities in the history of colonial rule in New Orleans.

Addressing the lower Mississippi Delta region in the early 1700s, under French and Spanish rule, Michael P. Smith observes a situation of cooperation between settlers, African slaves, and local Native Americans in the interests of survival in what was, at the time, a difficult physical environment for its climate and swampland.[81] The coexistence of these different ethnic groups, despite the inequality between them, spurred a cultural syncretism that was honed and performed openly in the city's public spaces. By the 1800s, after the Louisiana Purchase saw ownership of the city shift to Anglo-American rule, the exuberant black American culture that had previously been flourishing out in the open was effectively pushed into hiding due to more directly antagonistic and violent white repression,[82] but it nevertheless persisted, sustaining an attitude that formed the basis of what is among New Orleans's most famous post-emancipation musical traditions: the second line. This consists of a ritual parade involving marchers – often in costume – performing a pervasive, repetitive beat coloured by improvised flourishes. The second line is thus regarded by Smith as 'a rejection of the "destiny" of the white establishment to govern black society' and a way for participants to 'cleanse and renew the spirit of the community'.[83] Echoing the unfixing of words through transformations from nouns to verbs that defines the strategy of signifyin(g), Matt Miller notes that 'second line' is used in New Orleans as a verb, placing an emphasis on the open *process*

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[79] John Mowitt, *Percussion: Drumming, Beating, Striking* (Durham, NC: Duke University Press, 2002), 78.
[80] Ibid.
[81] Michael P. Smith, 'Behind the Lines: The Black Mardi Gras Indians and the New Orleans Second Line', *Black Music Research Journal*, 14/1 (Spring 1994), 43-73 (45).
[82] Ibid., 46-47.
[83] Ibid., 48-49.

of musicmaking that anyone in the vicinity can contribute by 'singing, clapping, or playing extemporaneous percussion parts', and that this openly process-oriented activity operates as a mobile site for participants to assert their belonging to particular neighbourhoods of the city.[84] Through this facet of the second line, a kind of 'representing' as hip hop culture would term it, the practice inevitably found itself invoked as a trope of potent local flavour in New Orleans hip hop music. The 1995 track 'Second Line Jump' by the New Orleans MC 2 Blakk, produced by Mannie Fresh, is carried by two syncopated brass riffs – one for the verses and one for the hook – that lock into the beat's drum part while serving as a sonic reference to the city's musical heritage.[85] Here, the jazz-derived, profoundly social impetus of second line music is conflated with the energy of 1990s New Orleans's block parties, where a style known as bounce proved to be enduringly popular.

Miller, confirming how the setting of the New Orleans block party is related to second line culture, asserts:

> Participants in block parties used music and other forms of expressive culture to transform some of the most deprived, stark spaces of the city into festive, multigenerational entertainment venues, as streets and sidewalks became impromptu dancefloors crowded with bodies, contributing to an alternate spatial, social (and, for some, economic) reality created and populated by the city's poor and working-class African Americans.[86]

The situation of bounce music mirrors the infrapolitical nature of early hip hop in the South Bronx, as musicians working at a grassroots level negate the degradation of neglected urban space using their own independent creative energies. While it may seem that the emergence of bounce represented a new, local genesis of 'real' hip hop for its independent character and inherent 'liveness', the style was rejected by many involved in the New Orleans scene who wanted the city's sound to be more similar – and therefore ostensibly more accessible – to the commercial market beyond Louisiana; identifying these local critics of bounce, Miller expands:

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[84] Matt Miller, *Bounce: Rap Music and Local Identity in New Orleans* (Amherst, MA: University of Massachusetts Press, 2012), 32.
[85] 2 Blakk, 'Second Line Jump (Original)', *The Game* (TTH Marketing Co., 1995).
[86] Miller, *Bounce*, 54.

> Their views were sympathetically received by music critics who disliked bounce and were eager to see New Orleans established as a home of more "serious" rap in an era when African American popular music and vernacular traditions were becoming increasingly central to the city's self-image and marketing as a tourist destination.[87]

There is an irony in this rejection of bounce, since the city's broadly recognised and celebrated cultural heritage is rooted in a kind of vernacular music, that is, early jazz, which was itself dismissed as trivial and not 'serious' enough by bourgeois cultural critics of the time. Bounce can be considered a continuation of New Orleans's black musical traditions not because of a hackneyed adherence to the musical codes of its antecedents, but because of its moulding of an identifiable and distinctive style out of free, spontaneous, and palpably social musical activities. From this underground scene, the labels No Limit and Cash Money found a solid footing in underground New Orleans hip hop before using their growing financial resources and marketing know-how to penetrate the music industry at the national level. It is in the output of these two labels that I will identify the two beatmaking styles that I view as being the most important in the ascendancy of Southern hip hop in the 1990s and 2000s, styles that created large amounts of wealth despite having roots in some of the most impoverished and dangerous urban areas in the country.

In the lyrics of New Orleans hip hop and bounce tracks of the 1990s, names of two of the city's most notorious housing projects, 'Magnolia' and 'Calliope', can be heard again and again, sometimes used as single word mantras, as MCs express their belonging to the communities of these localities. In her extensive study of the history of New Orleans's projects, Martha Mahoney points out that the schemes were originally intended to offer the area's poorer citizens short-term abodes that allowed for a higher quality of life than was possible in the aging, decaying slums of the early-to-mid 20th century at an affordable price, enabling them to save money so that they could eventually buy into the housing market.[88] For the most part, this outcome did not materialise, and the projects ended up being more like long-term residences for the poorest section of the black

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[87] Miller, *Bounce*, 76.
[88] Martha Mahoney, 'Law and Racial Geography: Public Housing and the Economy in New Orleans', *Stanford Law Review*, 42/5 (May, 1990), 1251-1290 (1251-1252).

population; this rendered the city's original plan of eradicating ghettoisation a failure

when the projects themselves became increasingly undesirable places to live over time.

Richard Campanella finds that a decisive moment in the projects' failure came in the

1960s, when the previously racially segregated communities were integrated, causing

white residents to depart out of a still-prevailing racism to leave a void to be filled by yet

more poor black citizens.[89] This flight was spurred by the same trend of white racism

permeating the city's labour market; Mahoney argues:

> Housing projects became predominantly black because of the exclusion of blacks from even
> subsistence-level employment. The shift from an upwardly mobile population to a
> chronically underemployed population coincided with the racial transformation of the public
> housing population as a whole. These shifts are not coincidental, but describe different parts
> of the same phenomenon: a segregatory process in which white people and jobs left the
> cities.[90]

Moreover, at an institutional level, the federal government's Home Owners Loan

Corporation (HOLC) imposed a rating scheme on urban neighbourhoods with four

categories; predominantly black areas were invariably placed in the lowest category, and

financial institutions did not issue loans to residents of areas ranking below the second-

highest category, thus depriving black residents of the opportunity to purchase their own

homes.[91] By confining people to the projects, a malignant form of social isolation defined

life for New Orleans's lower class black communities; it is from this situation that the

city's fledgling hip hop entrepreneurs, motivated first and foremost by the will to escape

poverty, devised their plans.

Among New Orleans's best-known contributions to hip hop is the output of No Limit

Records, a label established by Master P (the moniker of Percy Miller) after moving from

the Calliope projects to Richmond, California and running a record store that he opened

in 1989 using $10,000 received from a malpractice settlement after the death of his

grandfather.[92] Roni Sarig expounds that by running his store, P was able to learn about

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[89] Richard Campanella, 'An Ethnic Geography of New Orleans', *The Journal of American History*, 94/3
(December, 2007), 704-715 (710).
[90] Mahoney, 'Law and Racial Geography', 1253.
[91] Ibid., 1257-1258.
[92] Roni Sarig, *Third Coast: OutKast, Timbaland, and How Hip-Hop Became a Southern Thing* (Boston, MA: Da
Capo Press, 2007), 80.

the workings of the music industry and monitor what styles were selling the best, with Bay Area artists like Too Short and Spice-1 proving to be especially popular.[93] Addressing how P went about starting a label in addition to his store, Sarig claims:

> From the start, P's motivation was money. He had no great need to express himself, and no musical ambition to take hip-hop into somewhere new. He simply knew how cheap it was to make a record, how much he stood to earn, and what his customers were buying.[94]

In order to maximise his profits, P opted to make himself the label's main artist so that he did not have to give a cut of the money made from sales to anyone else, and he picked up on the status of New Orleans as a fertile market through its appetite for rougher, unpolished hip hop styles. According to Miller, P's strategy was to: 'capitalize on the growing appeal of Southern rap in the late 1990s, while maintaining distance from the limitations associated with local style and content';[95] this made for a conscious, commercially-minded realisation of glocalization, as P was shrewd enough to be able to develop a sound that was at once imbued with an underground, region-specific character and eminently saleable to a national audience. Sarig notes that P's album sales were bolstered by his two-fold underground appeal, appearing to represent both the West Coast and the South.[96] This was informed by P's involvement in the Bay Area scene and the musical sensibilities of the New Orleans-based beatmaker collective Beats by the Pound, who became the in-house production team for No Limit. The alliance of No Limit and Beats by the Pound appealed to P's dictatorial, business-oriented sensibility, as Sarig explains:

> The arrangement suited P, who liked to keep things tightly controlled and cost-effective (as the name implies, BBTP dealt in volume more than painstaking precision). Plus, requiring everyone on the label to use the in-house crew created a unified sound across all No Limit releases that fit with P's vision for the company – an army of foot soldiers, all equal and equally undistinguished, with only one general leading at the front.[97]

Although a label's focus on quantity over quality would ordinarily be considered a serious deficiency in terms of musical integrity, in the case of No Limit, P's requirement for hasty production work to fill his manifold releases helped to cultivate a 'raw' style that saw the

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[93] Sarig, *Third Coast*, 80.
[94] Ibid.
[95] Miller, *Bounce*, 122.
[96] Sarig, *Third Coast*, 85.
[97] Ibid., 86.

label emerge as the sound of the streets, giving listeners the impression that it was a keenly underground endeavour which belied P's aspirations to become rich through involvement in the music industry above anything else.[98] This is where No Limit's brand of region-specific hip hop music differs from other significant local scenes of the culture's history; the original hip hop scene of the South Bronx in the 1970s was entirely live and predicated on the practice of DJing, and Houston hip hop grew out of the mid-1980s rap battle contests at the Rhinestone Wrangler club that made a local star out of the Geto Boys' Willie D,[99] but No Limit's output was entirely a product of the studio, with no evidence of live, improvisatory practices.

Inevitably, as No Limit's underground following grew, the national hip hop industry began paying attention. In 1995, No Limit negotiated a pressing and distribution deal with Priority Records, known for facilitating the commercial successes of independent hip hop labels such as Death Row and Rap-A-Lot; this saw the records of P and No Limit's affiliated artists appear in stores across the United States from which they sold extraordinarily well.[100] Soon after the deal with Priority was completed, P released the album *True*, credited to the collective TRU (incorporating himself alongside MCs from Richmond and New Orleans like Big Ed and C-Murder), which included the track 'I'm Bout' It, Bout It', produced by beatmaker KLC of Beats by the Pound.[101] The track's lurching, menacing 75 bpm beat comprises a bright G-funk-esque whining synth placed at a high level in the mix, its roughness mirrored by a low, buried saw-tooth waveform-based bass sound. By contrast, a soft synthetic synth string part works as a 'glue' sound, holding together the beat's loops while a decidedly lo-fi quasi-boom bap drum part marks time. Such mixtures of harsh and soft, bright and lo-fi makes for unnatural textures that unnerve without KLC having to introduce any blatantly discordant pitched elements. As the track's duration elapses, the beat does develop substantially, except for the whining synth and strings parts dipping in and out of the mix, and an alternation between two different riffs. This gives the track a predictable, one-dimensional quality that, rather

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[98] Sarig, *Third Coast*, 86.
[99] Walker, *Houston Rap Tapes*, 67.
[100] Miller, *Bounce*, 118-119.
[101] TRU, 'I'm Bout' It, Bout It', *True* (No Limit Records, Priority Records, 1995).

than coming off as the work of a beatmaker who is simply out of ideas, compliments the nature of P's rhymes, which repeatedly resolve to variations on his first verse's opening lines: 'You 'bout it? I'm 'bout it 'bout it / If you 'bout it 'bout it, well, say you 'bout it, 'bout it', delivered in a loose, spacious flow. By deploying musical tropes of West Coast hip hop (the high, whining synth) on a beat with a profoundly slow tempo and an unrefined sonic palette that was typical of underground Southern rap, KLC produced a beat that reflected P's bid to bring the No Limit dynasty home with him to New Orleans, fostering what Miller describes as a: 'niche between "Louisiana Bounce," on the one hand, and California G-funk […] on the other'.[102] However, as commercially successful as No Limit was in the 1990s, its sound did not fully represent the musical culture that was happening in New Orleans on a grassroots level, that is, the bounce scene, which the city's other famous hip hop label Cash Money grew out of.

Miller points out that the word 'bounce' has been used widely in New Orleans's black music for several decades;[103] indeed, it has been used to describe a local, upbeat take of hard funk music that sustained the careers of musicians like Eddie Bo, Cyril Neville, and Warren Lee.[104] The invocation of 'bounce' in the city's local hip hop culture can be understood as following a strikingly similar trajectory to that of the original hip hop music of the South Bronx, which refigured the sound of hard funk to work as a street-based dance music. In the 1990s, the projects of New Orleans were the sites of block parties where dance was integral, and this was spurred by the jaunty, mid-tempo drive of bounce music that served to encourage unity and friendship between young people from the violent and oppressive Projects, as the MC Big Freedia recalls:

> Like church, Bounce gave me sense of connection. Shake your ass and your mind will follow. It had become my way of transmuting my pain into joy. For a generation of forgotten New Orleans youth, Bounce was the new church.[105]

This emphasis on dance is highly significant in the context of 1990s hip hop at large, as B-boying had fallen out of vogue and the performative toughness and stoicism of 'gangsta'

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[102] Miller, *Bounce*, 117.
[103] Ibid., 2.
[104] Various, *New Orleans Funk Volume 2 (The Second Line Strut)* (Soul Jazz Records, SJR CD 185, 2008).
[105] Big Freedia and Nicole Balin, *Big Freedia: God Save the Queen Diva!* (New York, NY: Gallery Books, 2015), 91.

themes permeated hip hop at both mainstream and underground levels. Dancing, and the bounce music that provoked it, presented a challenge to the orthodoxy of hip hop style at the time, going some way towards feminising it to make for a culture-within-a-culture that was less fixedly male and heterosexual. Sarig speculates that one of the crucial reasons behind the undeniable commercial superiority of Southern hip hop in the late 1990s and early 2000s may have been that it was more capable of operating as an openly party-oriented music than what the East and West coasts were offering, a return to the priorities that made hip hop so attractive to America's youth so quickly in the first instance.[106] Nowhere was this more apparent than in the style favoured by New Orleans's projects. The sense of close-knit community that bounce music's block parties encouraged was felt in the everyday life for many in and around the projects, as Miller finds that they 'contributed to a diverse array of small-scale entrepreneurial activities, providing income for the DJ and stimulating neighborhood businesses, which often sponsored the events',[107] and local residents were exposed to bounce music through the day as it was played on local radio stations which enjoyed large audiences over the summers due to the fact that residents preferred to be outdoors in conditions that were at least slightly cooler than those of their homes.[108] The uplifting sound of bounce music stems largely from the feel of its beats, which are typically based on a standardised, yet malleable core of sampled elements.

The single most important type of musical material in New Orleans bounce is the 'Triggaman', that is, a sample taken from the various loops and cadences of the instrumental version of the 1986 Showboys single 'Drag Rap'.[109] While it is not difficult to hear the polyrhythmic shuffle of 'Drag Rap''s drums and imagine a parallel with New Orleans marching band music, the Showboys were not a New Orleans-based group, but a crew from New York City signed to Profile records, making them labelmates of the Cold Crush Brothers and Run-DMC. The single was not a commercial success in the hip hop heartland of the East Coast, but in time, it became something of a cult favourite in the

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[106] Sarig, *Third Coast*, xvi.
[107] Miller, *Bounce*, 52.
[108] Ibid., 101.
[109] The Showboys, 'Drag Rap' (Profile Records, 1986).

south. By 1989, 'Drag Rap' was a staple of the Southern hip hop club DJ set, and it was from here that the Showboys, assuming that their single had been totally forgotten, were booked to play a 'Triggerman Weekend' event in Memphis before going on to play packed shows in Houston and New Orleans.[110] As New Orleans musicians sought to make their own beats, the popularity of 'Triggaman' made it an obvious choice of sonic source material, making for an altogether different kind of stylistic export from New York to the south than that of Houston-based DJs' adoption of 1970s South Bronx aesthetics and technologies. While the likes of the Geto Boys' DJ Ready Red knowingly brought the sound of early hip hop to Houston, New Orleans DJs stumbled on 'Drag Rap' – an artifact of blatantly commercial recorded rap music – by accident. The manner in which a single track spawned an entire (sub)genre of dance music is reminiscent of how drum and bass music was predicated on sampled breaks such as the 'Amen' break from the Winstons' 'Amen, Brother';[111] the numerous ways that such a track, comprised mostly of forceful percussion, can be dismantled and reassembled allow beatmakers to produce tracks that are familiar to listeners in an uncanny sense and representative of their idiolectic musical inclinations. The treatment of 'Drag Rap' by New Orleans bounce producers resembled a city-wide ongoing remix project, finding seemingly boundless potential in the track's drum loops, synthetic xylophone riff playing in sixteenth notes (known as the 'bones'),[112] and clattering rushes of snares.

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[110] Sarig, *Third Coast*, 256.
Memphis-based DJ Spanish Fly recalls that he had been playing 'Drag Rap' in his late 1980s sets, right before the earliest New Orleans bounce records came out, and suggests that it was he who first introduced the track to DJs in New Orleans as his mixtapes – those made by Spanish Fly himself and bootlegs – sold well there.
Noz, 'Hip Hop Pit Stop: The Slow And Low Sound Of Memphis's DJ Spanish Fly', *Red Bull Music Academy Daily*, 2012, https://daily.redbullmusicacademy.com/2012/07/noz-pit-stop-memphis-spanish-fly (10th March, 2017).
[111] The Winstons, 'Color Him Father / Amen, Brother' (Metromedia Records, 1969).
[112] Miller, *Bounce*, 79-80.

Fig. 5.3 – 12" single of 'Drag Rap' by The Showboys

The first New Orleans hip hop track to sample extensively from 'Drag Rap', and therefore the first bona fide bounce track, was 1991's 'Where Dey AT' by M.C. T. Tucker & D.J. Irv, a release that was distributed on cassette tape and copied widely by the youth of the city's projects.[113] The track's beat consists only of the main drum pattern and 'bones' loop repeating on turntables operated by Irv, who disrupts the flow with the turntablism techniques of rhythmic – albeit often heavy-handed – scratches and stopping the record. The musical result of this approach to production is, for all intents and purposes, an emulation of the sound of a live hip hop DJ set, supported by Tucker's chant-like party rhymes. The popularity of 'Where Dey AT' provoked other New Orleans DJs to produce their own 'Triggaman'-oriented releases with the same, or at least a very similar, title.

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[113] M.C. T. Tucker & D.J. Irv, 'Where Dey AT' (Charlot Records, 1991).

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Sarig likens this trend to the idea of the 'version' in Jamaican dub music, where an artist makes their own take on an existing song to further the musical culture's 'conversation'.[114] Given the early bounce sound's stylistic proximity to 1970s South Bronx hip hop, and hip hop's intrinsic debt to Jamaican music, Sarig's observation is well-placed and marks bounce as a conspicuous development in modern black American music. The most prominent of the versions of 'Where Dey AT' that followed the original was D.J. Jimi's 'Where They At', released in 1992 on Soulin' Records.[115] This track adds to the early bounce blueprint by using numerous short samples and quotations from a variety of well-known funk and hip hop tracks to introduce some textural developments to the beat as the track progresses and underpin the antiphony between the beat and the track's vocals. Among the samples and quotations is a sustained brass note taken from 'Hold It Now, Hit It' by the Beastie Boys,[116] made up of samples of Kurtis Blow's 'Christmas Rappin'' and Kool & the Gang's 'Funky Stuff'.[117] In the case of Jimi sampling the Beastie Boys, we have an example of a sample of a sample; to a purist sample-based beatmaking sensibility this might be considered a form of 'biting' as Jimi is using sounds that had been found, isolated, and combined by another beatmaker previously, but this is not a concern of bounce – the primary goal is to make beats that people will feel compelled to dance to. Jimi's version of 'Where They At' cemented itself as the definitive studio version of the classic bounce track, but as the style progressed over the 1990s and into the 2000s, the bounce beat style underwent further developments, one of the most significant being the introduction of a drum loop known as the 'Brown beat' sampled from DJ Cameron Paul's album *Beats & Pieces*.[118] Employing a similar rhythm to that of the 'Triggaman' loop, but with a weightier kick drum sound, the 'Brown beat' has been used to either reinforce the 'Triggaman' loop or work as a substitute for it, allowing beatmakers to modify the timbral and textural profiles over the durations of their beats without interfering with bounce's familiar, infectious groove. This extension, along with

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[114] Sarig, *Third Coast*, 257-258.

[115] D.J. Jimi, 'Where They At', (Soulin' Records, 1992).

[116] Beastie Boys, 'Hold It, Now Hit It' (Def Jam Recordings, Columbia, 1986).

[117] Kurtis Blow, 'Christmas Rappin' (Mercury, 1979).
Kool & The Gang, 'Funky Stuff' (De-Lite Records, 1973).

[118] Cameron Paul, 'Brown Beats', *Beats & Pieces* (Mixx-it, CP-BP, 1987).

the potential for multiple existing mid-tempo tracks to be signified on, ensured bounce's longevity.

As bounce was established as the main underground hip hop style of New Orleans, a phenomenon cited by Miller as 'remix bounce' emerged,[119] where rather than sampling short phrases of an existing track, DJs and beatmakers would effectively produce remixes by using sizeable portions of the original and layering them with 'Triggaman' samples and the 'Brown beat'. This practice can be understood as a region-specific form of the mashup, where two tracks are merged into one. Usually, a mashup entails an instrumental version of one track being mixed with an 'acapella' version of another; discussing the implications of mashup practice, Wayne Marshall ventures:

> Through direct juxtaposition, mashups seem to have the power to shape, with potent immediacy, one's sense of how musical style articulates ideas about community, tradition, influence, and interaction. Such musical procedures reimagine the world of the social through the evocative, sensual terms of the sonic.[120]

The result of divorcing a recorded performance (i.e. a vocal part) from its associated style or genre and placing it into a new context in this way is that the quality of the performance becomes secondary to the blatant, often outlandish nature of the juxtaposition. Bounce production of the late 1990s onwards offers potent examples of this mashup-like approach, particularly in what is regarded as New Orleans's 'sissy bounce' scene as observed by Miller, where queer MCs, including drag artists, perform bounce sets in the city's queer-oriented clubs.[121] Still, Big Freedia, arguably the most prominent MC to be considered a 'sissy bounce' artist, claims that she does not recognise 'sissy bounce' as being any different from bounce music in general,[122] and the forceful beats that she rhymes on support this. BlaqNmilD, the beatmaker of Freedia's early tracks credits himself with being responsible for popularising a frenetic refinement of bounce music that is slightly faster than the classic sound of 'Where Dey AT' and has

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[119] Miller, *Bounce*, 149.
[120] Wayne Marshall, 'Mashup Poetics as Pedagogical Practice' in Biamonte, Nicole (ed.), *Pop-Culture Pedagogy in the Music Classroom* (Lanham, MD: Scarecrow Press, 2011), 307-315 (309).
[121] Miller, *Bounce*, 157.
[122] Jordan Flaherty and Amy Goodman, *Floodlines: Community and Resistance from Katrina to the Jena Six* (Chicago, IL: Haymarket Books, 2010), 25.

more complex treatment of 'Triggaman' samples: 'I am the first one who started chopping bounce so much […] I can take one word and make a whole song. I am the reason bounce is faster now. It's as hype as it is because of me'.[123] BlaqNmilD's style is exemplified by the Big Freedia track 'Rock Around The Clock',[124] a 'remix bounce' appropriation of the 1955 rock and roll hit '(We're Gonna) Rock Around The Clock' by Bill Haley and His Comets.[125] Here, BlaqNmilD alternates between playing the intro section of '(We're Gonna) Rock Around The Clock' in isolation and a hybrid of bounce drum loops, with the rapid rush of snare hits of 'Drag Rap' sampled to heighten tension before dropping into subsequent bass-heavy sections – a tactic that is used liberally in other forms of contemporary electronic dance music. A further sample from the intro to the classic 1996 Cash Money Records bounce track 'Monkey On Tha D$ck' by Magnolia Shorty, an MC from the notorious Magnolia projects of New Orleans's 3rd Ward, serves to signal Freedia and BlaqNmilD's belonging to the city's underground hip hop culture.[126]

When Hurricane Katrina struck New Orleans in 2005, the neighbourhoods that pioneered bounce music were ravaged, their communities displaced. This materialised because of what Campanella identifies as economically engineered racial segregation in the city, where the city's black residents were concentrated in low-lying areas.[127] In the aftermath, the geographical factors of underground New Orleans bounce music were profoundly different; Miller explains:

> With the transformation of New Orleans into a smaller, whiter city with fewer areas of concentrated black poverty, the core audience for bounce artists was dispersed and diminished to an important extent. But the sissy rappers were better positioned than most to carve out a viable career in the years after Katrina, largely because of their crossover appeal with a mostly white, middle-class audience base.[128]

The recorded output and live performances of artists such as Big Freedia and the beatmakers they worked with thus prolonged the life of bounce at a local level, reviving

[123] Michael Patrick Welch, 'Big Freedia: Do Azz I Say', *OffBeat Magazine*, 2011, http://www.offbeat.com/articles/big-freedia-do-azz-i-say/ (10th December, 2019).
[124] Big Freedia, 'Rock Around The Clock', *Hitz Vol. 1 1999-2010* (Self-released by Big Freedia, 2010).
[125] Bill Haley And His Comets, '(We're Gonna) Rock Around The Clock', *Rock Around The Clock* (Decca, 1955).
[126] Magnolia Shorty, 'Monkey On Tha D$ck', *Monkey On Tha D$ck* (Cash Money Records, 1996).
[127] Campanella, 'An Ethnic Geography of New Orleans', 711.
[128] Miller, *Bounce*, 170.

the spirit of the musical culture pre-Katrina. This underground scene, however, does not constitute the entirety of bounce's story; concurrent with the growth of 'sissy bounce', Cash Money Records rose to prominence nationally with a take on bounce that served as the foundation for one of modern hip hop's commercial dynasties.

Emboldened by the evident viability of New Orleans hip hop in recorded form on the back of 'Where Dey AT', brothers Bryan 'Baby' Williams and Ronald 'Slim' Williams formed the label Cash Money Records in 1991 and quickly went about releasing records by local acts like Lil Slim, U.N.L.V., and M.C. Heavy. The latter's 1992 single 'Gangster Walk' offers a taste of New Orleans street music through its buoyant trombone riffs and shuffling drum patterns,[129] and an extended sample from the Sugar Hill-released track 'Drop the Bomb' by Trouble Funk is dropped halfway through to make for a contrasting section which capitalises on the common tempi and polyrhythmic impetus shared between Washington D.C.'s 'go-go' style of funk and bounce.[130] Cash Money's niche of releasing records that were informed by both the sounds of the second line and block party cultures in New Orleans was consolidated by the recruitment of DJ Mannie Fresh as the label's in-house producer after he had finished working as the DJ for the MC Gregory D.[131] Mannie Fresh's sound lent an undeniable slickness and consistency to Cash Money's sound, as he was proficient with a wide range of music technologies including drum machines and synthesisers in addition to more conventional musical instruments like guitars and keyboards; as Miller notes, his background as a more conventional musician aided him in being able to produce beats that were recognisably bounce-esque in character but did not necessarily make use of 'Triggaman' samples: 'His ability to capture the dynamic polyrhythm of bounce without using any of its key samples contributed to Cash Money's reputation as a source of exciting and original rap music'.[132] This ability can be heard in the early output of Lil Wayne, an MC who honed his skills as part of the group Cash Money group the Hot Boys before becoming a solo artist. Lil Wayne's debut single 'Tha Block is Hot', released in 1999, sees Mannie Fresh programming stuttering patterns

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[129] M.C. Heavy, 'Gangster Walk', (Cash Money Records, 1992).
[130] Trouble Funk, 'Drop The Bomb', *Drop The Bomb* (Sugar Hill Records, 1982).
[131] Sarig, *Third Coast*, 263.
[132] Miller, *Bounce*, 136.

with a set of lo-fi drum sounds while melodic piano lines and deep bass notes penetrate layers of textural sounds and peripheral vocal samples that move around the stereo field;[133] the mix as a whole, comprised of several discrete elements, makes for a furiously busy beat that matches the rhythmic complexity of Wayne's performance, which, unlike earlier bounce music's vocal performances, switches between a variety of different flows and rhyme schemes. This represents a considerable expansion of bounce, and one that allowed the style to hold its own in the more commercial domain of hip hop nationally, as Mannie Fresh's beats were not as openly derivative and repetitive as those that were predicated on 'Triggaman' samples.

By 2005, many of Cash Money's artists left the label's roster citing unpaid royalties, but Lil Wayne stayed, and was rewarded for his loyalty with his own imprint – Young Money.[134] This marked the beginning of Wayne's 'Carter' series of albums that cemented his status as a national hip hop star, diverging from the bounce style and working with several different producers. In 2008, Wayne had a major hit single with 'A Milli',[135] a track which features a beat made by Bangladesh that contrasts sharply with Mannie Fresh's densely polyrhythmic style for the way it consists of only three elements: a basic drum pattern (of only kicks and handclaps), a powerful bass synth reminiscent of an overdriven TR-808 kick with a long sustain, and a loop of a pitched-down vocal sample that repeats 'a milli- a milli- a milli- a milli- a mil- a mil…' to provide a simple hook from which Wayne embarks on a sprawling, unbroken verse. Bangladesh's spartan assemblage of heavily-processed yet simple sounds delivers a potent dichotomy of minimalism versus maximalism, mirroring Wayne's strategy of subjecting a series of knotty, signifyin(g) rhymes to the most basic song structure possible, evoking the off-the-cuff swagger that characterised the live block party performances of historical underground hip hop scenes like those of the South Bronx and the New Orleans projects. Moreover, the beat's tempo of 77 bpm is significantly lower than the 92-105 bpm range that is typical of bounce, and this serves to give the bass hits ample time to resonate in the mix before being

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[133] Lil Wayne, 'Tha Block is Hot', (Cash Money Records, Universal Records, 1999).
[134] Sarig, *Third Coast*, 269.
[135] Lil Wayne, 'A Milli', (Cash Money Records, 2008).

retriggered. The main combination of sounds is disrupted every two bars when the bass is removed from the mix and the drum pattern is replaced by a snare figure that locks into the implicit pulse of the remaining vocal loop, making for a double-time feel that suggests 152 bpm. The introduction of this snare figure could be heard as a possible reference to New Orleans second line culture, but its main function is to establish a kind of ongoing antiphony with the slower, heavier main beat. 'A Milli''s leanness, mitigated by the infectiousness of its beat's hook, made a significant impression on hip hop at large, with several other MCs releasing their own tracks using Bangladesh's beat, and its ubiquity made it an unsurprising winner of Best Rap Performance at the 2009 Grammy Awards.[136] 'A Milli''s runaway success represented a watershed moment for Cash Money and Young Money, as the former allowed the latter to jettison the reliance on a single, recognisable local style in order to foster crossover potential on the national and international stage; as Miller puts it:

> If the persistence of "that [Triggaman] beat" in New Orleans clubs and parties speaks to the ways in which the city's rap draws from long-standing and deeply rooted traditions and cultural history, Lil Wayne's work represents the possibilities for a small number of individual artists to transcend the local or regional context.[137]

Young Money's transcendence of bounce came about as the music industry's corporate machinery – in this case Universal and Republic, who have distributed Cash Money and Young Money's records since 2000 – manoeuvred to capitalise on the Southern hip hop's popularity, marking another episode in hip hop music's ongoing history as a totality of underground culture and the culture industry, and this has had a profound effect on the beatmaking style(s) of the label's output.

The dilution of the region-specific styles that No Limit and Cash Money dealt in came about when they effectively became satellites of larger companies, and to compound this, Hurricane Katrina refigured the geography New Orleans drastically, causing great turmoil and forcing many to leave the city. Big Freedia, looking to continue her career as an MC but lacking her familiar, established locale to perform in, began taking regular

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[136] 'The 51st Annual Grammy Awards Winners List', *Grammy.com*, 2010, https://web.archive.org/web/20101011133036/http://www2.grammy.com/grammy_awards/51st_show/list.aspx#07 (17th December, 2019).
[137] Miller, *Bounce*, 161.

bookings in Houston, spearheading bounce's invasion of a city that had previously exhibited a taste for more languid styles of hip hop.[138] Freedia claims that the apparent mobility of bounce helped her and others originally from New Orleans to reckon with the horrors of Katrina: 'My shows in Houston became places of healing and transformation. It was like all Katrina refugees were coming for healing those Friday and Saturday nights. It was our church'.[139] It is this ability of a style to become unfixed from where it is understood to operate in, or even spawn a new style, that I have found to be paramount in the evolution and proliferation of approaches to hip hop beatmaking, and this is also discernible in the output of hip hop's most visible contemporary artists. Vestiges of 'golden age' hip hop, Screw music, and bounce are all detectable in beats for tracks that feature on releases by Drake, one of Young Money's best-selling acts. The track 'Childs Play' from the 2016 album *Views*, produced by 40 and Metro Boomin,[140] combines 40's sonic signature of long chord pads pierced by TR-808 drum hits with a decidedly lo-fi looping sample of the underground New Orleans bounce track 'She Rode That Dick Like a Soldier' by HaSizzle, making for a mix of lo-fi and hi-fi elements and an attempt to imbue an otherwise texture-carried beat with the infectious rhythmic thrust of New Orleans street music, even as it plays at a relatively low volume level.[141] Drake's dalliance with bounce continued in 2018, as his single 'Nice For What' is carried by a beat co-produced by BlaqNmilD;[142] as a looping pitched-up vocal sample from the Lauryn Hill track 'Ex-Factor' is established,[143] a series of elements that define bounce style are introduced, including a figure that mimics the lilting, bass-heavy 'Brown beat' break and various 'Triggaman' samples such as the 'bones' loop and the stuttering snare cadences. Drake's artistry in the mid-to-late 2010s has also been heavily informed by the sound of underground hip hop in Houston, with slow tempi and droning, murky mixes reminiscent of Screw tapes. This has been exaggerated by unofficial 'chopped and screwed' mixes of Drake's records such as the version of *Views* by DJ Purpberry, which emulates the

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138 Big Freedia and Balin, *Big Freedia*, 158.
139 Ibid., 162.
140 Drake, 'Childs Play', *Views* (Republic Records, Cash Money Records, Young Money Entertainment, 2016).
141 HaSizzle, 'She Rode That Dick Like a Soldier', *The Voice of Bounce, Vol. 1* (The Sizzles Entertainment, 2016).
142 Drake 'Nice For What' (Young Money, Cash Money Records, 2018).
143 Lauryn Hill, 'Ex-Factor', *The Miseducation Of Lauryn Hill* (Ruffhouse Records, C2 69035, 1998).

turntablism and signal processing techniques of DJ Screw to lend the beats of Drake's favoured beatmakers 40 and Boi-1da a weightless, ethereal quality.[144]

Although the scope of this chapter has been to identify and explore region-specific styles, the exponents of these styles do not necessarily insist on an inextricable link to a locale's musical history. This is made clear in the documentary movie *The Carter* which follows Lil Wayne while his album *Tha Carter III* dominates the hip hop landscape, as the protagonist becomes aggravated by persistent questions about the relevance of New Orleans jazz to his own artistry.[145] Wayne's irritability should serve as a reminder that one should be careful not to make simplistic connections between musical styles and eras associated with a certain area. Furthermore, region-specific styles in hip hop have always been fluid; the 1994 track 'Trigga Rap (Remix)' by the Memphis underground icon DJ Spanish Fly makes use of 'Triggaman' samples and a Screw-esque slowed-down soundscape simultaneously, resulting in what can very easily be imagined as a raw, embryonic version of the trap style that emerged from Southern hip hop and went on to become the dominant beatmaking approach in hip hop across the United States throughout the 2010s.[146] Indeed, as this decade approached its end, the scope of music geography looked increasingly dubious in terms of its application in hip hop studies, as artists and listeners alike became increasingly concerned with negotiating online 'spaces'.

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[144] Drake, *Views (Chopped and Screwed)* (Self-released by DJ Purpberry, 2016).
[145] *The Carter*, by Adam Bhala Lough, 2009, 75 min. (DVD, QD3 Entertainment).
[146] DJ Spanish Fly, 'Trigga Rap (Remix)', *A.B.C.D.E.* (Self-released by DJ Spanish Fly, 1994).

Chapter 6 – The Modern Underground

> Kill the connect
> Repo man when I come to collect
> Beat 'em like Rhythm Roulette.[1]

On Music Ethnography

As I set about researching modern hip hop beatmaking, I opted to conduct interviews with beatmakers to glean insights into the technologies, creative approaches, and wider cultural concerns that are salient in their practices. This ethnographic work has been guided by the principle that I should seek to have information shared with me by the people I engage with as opposed to assuming that I can fabricate my own information based loosely on their answers, or, as James P. Spradley puts it: 'Rather than *studying people*, ethnography means *learning from* people'.[2] My interviews were carried out online by way of computer-mediated communication (CMC), resulting in the production of digital text scripts that, as Chris Mann and Fiona Stewart highlight, are 'complete and immediately available for analysis', in contrast to the products of face-to-face ethnographic activities which require laborious transcription.[3] Moreover, Mann and Stewart find CMC to be particularly effective for its ability to facilitate open and honest dialogue, relatively free of social awkwardness, that allows interviewees to 'say what they genuinely think in an informal or even anonymous setting',[4] getting closer to Spradley's ideal of the interview as a 'friendly conversation'.[5] I found that I was able to benefit from the openness that comes from such an informal kind of exchange as I carried out 'synchronous' CMC interviews involving real-time conversations with beatmakers using web chat platforms, whereas the 'asynchronous' CMC interviews I

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[1] JPEGMAFIA, 'Real Nega', *Veteran* (Deathbomb Arc, 2018).
[2] James P. Spradley, *The Ethnographic Interview* (Fort Worth, TX: Harcourt Brace Jovanovich College Publishers, 1979), 3.
[3] Chris Mann and Fiona Stewart, *Internet Communication and Qualitative Research: A Handbook for Researching Online* (Thousand Oaks, CA: Sage Publications, 2000), 22.
[4] Ibid., 25.
[5] Spradley, *The Ethnographic Interview*, 58.

carried out via email were not quite as revealing (though they were easier to organise and execute).[6]

According to Sara Cohen, the approaches of early anthropologists, exhibiting a 'unreciprocal' attitude that reinforces the dichotomy of object versus subject, have been superseded by researchers who seek to follow: 'a more negotiated, reflexive, discursive or intersubjective model of ethnographic practice'.[7] Where early anthropologists aimed to maintain a certain distance in their fieldwork, intentionally refraining from becoming involved in the practices they observed so that they could claim a kind of neutral 'objectivity', modern researchers, including those working in ethnomusicology, are more inclined to embrace the role of 'participant'. Through my own beatmaking activities, I have been able to share my own creative outputs with the beatmakers I have interviewed to find common threads and prompts for further topics of inquiry pertaining to musical practice. When I completed my ethnographic activities and began interpreting the information I received, I noted Cohen's suggestion that effective ethnographic study should not only constitute the description of things observations made during fieldwork, but a tempering of this information with existing knowledge and experience, which: 'can […] allow for complexity and provide interpretive power'.[8] Regarding my project's concern with place and how it might be seen as not being as relevant as it was prior to the 2000s due to the prevalence of Internet technology, I consider René T. A. Lysloff's assertion that rather than transcending the idea of place, the way we understand the Internet is, invariably, bound up with it:

> When we connect our computers to the World Wide Web, we suspend disbelief and embark on a metaphorical voyage. Web-related language is already filled with metaphors for journey and place: we go to sites, we visit webpages, we surf or cruise the Internet, we travel on the information highway to certain homepages and so on.[9]

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[6] Mann and Stewart, *Internet Communication and Qualitative Research*, 2.
[7] Sara Cohen, 'Ethnography and Popular Music Studies', *Popular Music*, 12/2 (May, 1993), 123-138 (124).
[8] Ibid., 133.
[9] René T. A. Lysloff, 'Musical Life in Softcity: An Internet Ethnography' in Lysloff, René T. A. & Gay, Leslie C., (eds.), *Music and Technoculture* (Middletown, CT: Wesleyan University Press, 2003), 23-63 (40).

In this chapter, then, I will examine how online platforms that exist to aid both the production and dissemination of music can be understood as 'places', hosting communities and leaving different kinds of impressions on their visitors.

Modern Beatmaking Tools and Online Platforms

Among the most significant developments in hip hop beatmaking in recent years is the proliferation of websites that sell digital resources for music production; these include businesses that sell sample packs like the 'boutique' website The Drum Broker. The digital sample packs that The Drum Broker specialises in are made up of sampled drum hits, collectively termed 'kits', which have been assembled by renowned beatmakers; the website's 'Who we are' page lists Alchemist, Havoc, and 9th Wonder among its contributors, claiming:

> Don't confuse us with lame sites selling "knock off" drum kits or cheap drum sounds designed by inexperienced sound designers. We ensure quality by hand selecting each producer & sound kit our site carries.[10]

Here, The Drum Broker wields the names of respected beatmakers as commercial assets, intellectual properties intended to assure their target market that the sounds they are selling are of the highest quality and authentic to the accepted aesthetics of contemporary sample-based hip hop styles. In a promotional video advertising his 'Secret Sauce' sample pack, Alchemist describes himself as a 'hunter' of sounds, an allusion to his extensive crate-digging activities, and explains that all of the featured samples were taken from old floppy disks he had kept from his time using the Ensoniq ASR-10 sampler.[11] The content of this sample pack is consistent with that of The Drum Broker's other products, which, as the website boasts, benefit from the sonic characteristics that result from the sounds being played through classic beatmaking machines:

> Our hip hop drum samples have been processed using expensive and hard to find vintage analog outboard gear and drum machines to ensure warmth and maximum punch. Some drum machines we use to get that "classic" 12-Bit grit/crunch are the Akai MPC-60, E-Mu SP-

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[10] 'The Drum Sample Broker - Hip Hop Drum Samples, Drum Sounds, Hip Hop Drum Kits, Break Beats, TR-80 - Who we are', *The Drum Broker*, 2017, https://hiphopdrumsamples.com/pages/about-us (2nd August, 2017).
[11] 'Alchemist - Secret Sauce (Behind The Beat Video + Alchemist Drum Kit)', *YouTube*, 2016, https://youtu.be/TKtmBSwpzt0 (2nd August, 2017).

1200, ASR-10, and Roland TR-808. Our drum kits are also made "mix ready", meaning EQ'd and compressed to perfection so that each sample requires little to no tweaking.[12]

What is being offered here represents a departure from hip hop beatmaking practice as it existed between the 1980s-2000s for two reasons: despite producers like Alchemist romanticising the process of crate-digging in interviews and promotional materials, by building and selling sample packs through The Drum Broker they are effectively removing the need for the beatmakers who buy their products to do any digging of their own, and by processing the samples in a way that, supposedly, optimises them so that they can be mixed easily with other elements on a track, the skills of chopping and mixing that have seen hip hop beatmaking retain a nuanced connection to its precedent of DJing are rendered unnecessary. Where purist sensibilities would hold that having others do the digging and processing for you is 'biting' and that ultimately such an experience of production is a hollow one, The Drum Broker, while apparently invested in the integrity of hip hop as a musical culture through its roster of respected signature producers, does not voice or address any such concern at all. This suggests that while the aesthetics and compositional strategies of sample-based hip hop may remain popular with many contemporary beatmakers, there is no longer a universal expectation that a sort of ethical creative code should be followed. Furthermore, beyond sample packs, the role of websites in facilitating easier access to beatmaking resources has been extended to include access to production software.

Launched in 2013, the cloud-based platform Splice has pioneered a model that allows producers to rent software plugins, encompassing virtual instruments and digital effects, that might otherwise be prohibitively expensive to buy outright. This 'rent-to-own' scheme offers free access to 'world-class' plugins for three days, and then the user begins to pay a monthly fee until they have paid off the full value of the software.[13] Once acquired, these plugins can be linked to the producer's DAW software of choice through Splice's cloud interface.[14] In addition to its model of hosting virtual instruments and

[12] 'The Drum Sample Broker - Hip Hop Drum Samples, Drum Sounds, Hip Hop Drum Kits, Break Beats, TR-80 - Who we are'.
[13] 'Rent-to-Own VST & AU Plugins | Splice', *Splice*, 2018, https://splice.com/features/plugins (31st January, 2018).
[14] 'Splice', *Splice*, 2018, https://splice.com/features/studio (31st January, 2018).

effects plugins for producers to rent, Splice also sells sample packs in a similar way to The Drum Broker; in an article addressing this 'Sample Store' service published by *Billboard*, Just Blaze states that he was prompted to make an official collection of his favoured drum samples exclusively for Splice after being frustrated by seeing 'fake kits' circulating online, and trap/EDM (electronic dance music) producer Krane claims that he has been able to initiate collaborations through the platform's community of users.[15] According to these producers, Splice has been highly beneficial to their musical development and abilities to control their profiles as artists, but the question remains of how closely this way of working represents what it means to be a hip hop beatmaker with regard to the culture's aesthetics and strategies of signifyin(g) on sound. Moreover, Splice also sells preset data for virtual instruments as programmed by established producers so that dilettante beatmakers can get straight into making tracks without having to learn how to generate their own sounds from scratch. Like with the use of sample packs, this could be considered by some hip hop musicians as a form of 'biting', and the use of types of sounds that have been made popular by their use in well-known tracks can see them become standards that cause fixity in music through their repeated use across numerous tracks. Irrespective of whether or not such platforms can be considered legitimate in hip hop culture, however, they appear far more likely to flourish than die out in the coming years.

Hip hop music's scenes of the 1980s and 1990s exhibited a highly perceptible degree of compartmentalisation along the lines of geography, even as the flexibility and fluidity of the genre allowed for region-specific scenes to draw stylistic ideas from one another. Upon the onset of the Internet age, however, this changed rapidly, as sonic signatures of American cities became increasingly less distinct. Reflecting on how region-specific styles were more prevalent in the 1980s and 1990s, Matt Sonzala, a hip hop promoter who worked as a studio intern during the recording sessions of the Geto Boys album *We Can't Be Stopped*, claims:

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[15] 'Inside Splice Sounds: How Sample Store Fosters Innovative Artist-to-Artist Content | Billboard', *Billboard*, 2016, https://www.billboard.com/articles/news/dance/7392770/splice-sounds-sample-store-feature-innovative-artist-content-dance (31st January, 2018).

New York people didn't care about anything except for what they were doing. The West Coast made their own thing. And it's sad that some of that's kinda changed. As the perspective should have gotten wider, it's gotten more narrow I think. […] Back then it was such a new culture, it was kind of dynamic. So like the Houston stuff sounded like Houston […] Even though it had a West Coast influence, you know, the people in the hood – none of us had internet or cellphones and all that, so they just had what was happening around them.[16]

The purported compromising of hip hop's musical diversity that Sonzala laments here is suggested to be a consequence of advances in digital technology that have facilitated faster and easier transfers of data across long distances; this amounted to an example of what John Connell and Chris Gibson regard as 'decentralisation' – a facet of globalisation that lessens the need for an individual to be physically present in a certain area to be involved in a musical community,[17] resulting in a situation that necessitates more intuitive ways of 'differentiating products, of sorting through, categorising and finding music genres' so that listeners could be better equipped to discover and consume new music in a saturated marketplace.[18] Today, a nexus of social media services, music streaming services, music journalism websites, and cloud-based music sharing platforms defines the terrain that professional hip hop beatmakers must negotiate.

In December 2018, a teenager using the moniker Lil Nas X released the track 'Old Town Road', a country-tinged hip hop single that went on to retain the number 1 position on the *Billboard* Hot 100 chart for nineteen weeks.[19] The enormous commercial success of this single belied the cheap and hasty nature of its production; the track's beat, which hinges on a looping banjo figure sampled from the Nine Inch Nails instrumental track '34 Ghosts IV',[20] was purchased by Lil Nas X from a Dutch beatmaker known as Youngkio, reportedly for only $30, through the beats-oriented online marketplace platform BeatStars.[21] This development vindicated the model of the platform, which since its launch in 2008 has allowed beatmakers to set up personal profile pages where they can

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[16] Lance Scott Walker, *Houston Rap Tapes* (Los Angeles, CA: Sinecure Books, 2013), 73.
[17] John Connell and Chris Gibson, *Sound Tracks: Popular music, identity and place* (London: Routledge, 2003), 258.
[18] Ibid., 261.
[19] Lil Nas X, 'Old Town Road' (Columbia, 2018).
[20] Nine Inch Nails, '34 Ghosts IV', *Ghosts I-IV* (The Null Corporation, 2008).
[21] Dan Reilly, 'Lil Nas X's 'Old Town Road' Was Destined to Disrupt', *Vulture*, 2019, https://www.vulture.com/2019/04/lil-nas-x-old-town-road-controversy-explained.html (27th January, 2020).

upload their beats, allowing listeners to play them in the website's embedded player. A recording artist who wishes to use a beat for their track can be granted permission to do so from the beatmaker; in her report on the workings of platforms such as BeatStars, Andrea Domanick finds that beats can be either bought outright, so that the buying artist is able to use it exclusively, or 'lease' it for a smaller fee, which entails non-exclusivity and a more limited scope of use, i.e. for a mixtape type release as opposed to a full studio album.[22] This is posited as a ground-breaking and highly advantageous system for beatmakers because it grants them autonomy from the various types of agents that have operated in the record industry since its inception, as Domanick explains:

> Where mainstream producers must divide profits, wait months on payments, and may never see their beats used at all, internet producers […] argue that their business model cuts out the middlemen, allowing them to sell whatever they want, to whomever they want, on whatever terms they see fit – and see an immediate payday.[23]

Keeping in mind Connell and Gibson's observation that online music resources are both the result and ongoing cause of popular music's 'decentralisation', of a kind that might amount to a homogenisation of musical style, a visit to the BeatStars website will reveal a trend of beatmakers producing and uploading tracks called 'type beats', where beatmakers aim to mimic the sounds of a recent hit records. To verify this, in January 2020 the 'Free Beats' section of the website featured several examples of instrumentals with titles that included the names of mainstream hip hop mainstay Eminem, who had released a surprise new album earlier in the month, the recently-deceased controversial 'SoundCloud rapper' XXXTentacion, and the Charlotte-based breakout star DaBaby.[24] Domanick deduces that the 'type beat' practice is the result of beatmakers' wishes to 'help increase a track's visibility by aligning with the sound of a popular artist, song, or producer for which a prospective buyer might be searching', in order to 'capitalise on [musical] trends'.[25] This is sound enough, though it might also be helpful to understand it as being an internet search-oriented variation of the sonic mimicry and blatant 'biting' of established artists and hit records that has always existed in hip hop production –

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[22] Andrea Domanick, 'Pay-per-Beat: Inside the Underground Economy Shaping Soundcloud Rap', *Noisey*, 2017, https://noisey.vice.com/en_uk/article/3kvzxj/inside-the-underground-beat-market-shaping-soundcloud-rap-v24n8 (16th April, 2018).

[23] Ibid.

[24] 'Free Beats | Free Instrumentals | Free Rap Beats | Download', *BeatStars*, 2020, https://www.beatstars.com/free-beats (27th January, 2020).

[25] Domanick, 'Pay-per-Beat'.

'Rapper's Delight' and 'Where Dey AT' being notable examples that this thesis has addressed. Furthermore, the popularity of BeatStars, spurred by the way in which it allows beatmakers to earn money through their music, bypassing the apparatus of the established music business, can be regarded as an echo of early hip hop culture's alternative, youth-led economy that was sustained by events like block parties in the South Bronx, unfixing the standardisation of leisure in New York City to allow for young promoters, DJs, and MCs to make money for themselves first and foremost.
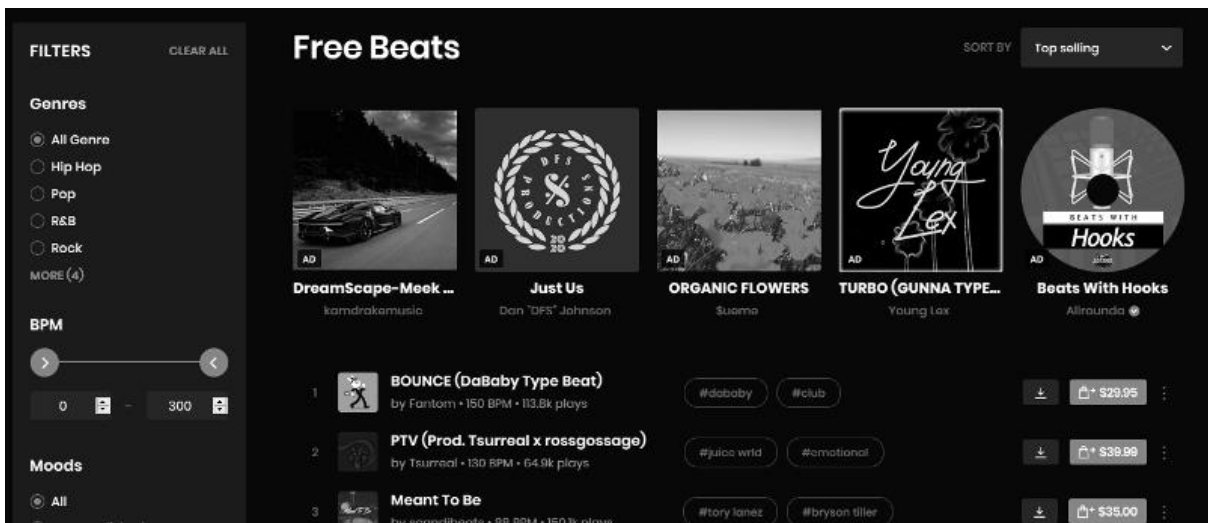
Fig. 6.1 – 'Free Beats' page of the BeatStars website

To investigate the technologies used in the creative side of BeatStars-oriented modern beatmakers' endeavours, I approached Jas, a user of the platform who I initiated contact with via email. Jas informed me that she favours the DAW software FL Studio, which she adopted after abandoning the hardware/software hybrid solution Maschine; to justify this switch, Jas told me: 'i wanted a better work flow when i created. Maschine wasnt difficult to work with, i just felt like FL was better when it came to mixing and using other plugins'.[26] Here, Jas states that her preference as a producer is for a finer level of control over her mix levels and parameters on her virtual instruments/effects than what is afforded by Maschine, with the hardware-style MPC-like workflow that Maschine seeks

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[26] Jas, personal communication (23rd November, 2017).

to facilitate not being something that she insisted on. Since she hinted at having a tendency towards mostly using virtual instruments in her beatmaking, I asked Jas about the ones that she uses most – she replied that among her favoured virtual instruments are Nexus by reFX, Electra by Tone2, and Dune by Synapse.[27] All of the virtual instruments named here are available for beatmakers to 'rent' on the Splice website,[28] and all are synthesisers. What is interesting here is that the types of software synthesiser-based tools that Jas and many other beatmakers maintaining a presence on BeatStars favour are remarkably similar to those used by modern producers of EDM. Instead of using samplers to edit and sequence existing sounds, beatmakers who work in the trap-informed styles that dominate BeatStars appear more inclined to build their tracks based on combinations of bass, pad, and lead sounds played through patches – some preset, some original – selected on virtual instrument synthesisers, mirroring the compositional sensibilities and workflow of EDM production. These synthesisers are popular with producers of EDM for their prioritising of high fidelity sound, facilitation of digital sound synthesis at a granular level, and the convenience of these systems being easily integrated into DAW software. Through the Splice platform, these are the same resources that modern software-based hip hop beatmakers have at their disposal, assuming they are willing and can afford to keep abreast of the latest developments in music technology. Hence, it is unsurprising that some producers are now knowingly bridging the styles of hip hop and EDM. After explaining that he was able to find success as a professional musician after giving up on trying to penetrate the crowded market of hip hop production with beats that were strictly hip hop in character, Kenny Beats, who has produced beats for a number of hip hop artists including Vince Staples and JPEGMAFIA, attributes his style and technical aptitude to his immersion in EDM culture:

> When I'm mixing rap, even if it's like some super street hard shit, I'm calling EDM producers to ask about compressors and reverb. Those dudes know more than anyone I ever met. Being in the EDM world taught me that nothing's impossible. There are so many resources that EDM producers get put onto on day one that rap producers don't find about for five years.[29]

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[27] Jas, personal communication.

[28] 'Plugins - Rent-to-Own (VST, AU)', *Splice*, 2020, https://splice.com/plugins/rent-to-own (30th January, 2020).

[29] Will Schube, 'Kenny Beats is Hip-Hop Production's Prodigal Son', *Pitchfork*, 2018, https://pitchfork.com/levels/kenny-beats-is-hip-hop-productions-prodigal-son (20th November, 2018).

Strictly speaking, the situation of hip hop and dance music sharing technologies is not a new one, as various dance music styles have come about through the same technologies that recorded hip hop music has relied on over its four decades. This condition has resulted in crossover styles that incorporate elements of both dance music and hip hop, like the electro-funk style of the 1980s instigated by 'Planet Rock', which made the TR-808 drum machine popular with dance music producers and hip hop beatmakers alike.

To address an example of a highly successful modern crossover between hip hop and dance music occurring in the mainstream, coming about when a prominent dance music producer released a slower track with a hip hop MC on vocals, I turn to DJ Snake's 2014 single 'Turn Down For What', featuring the Atlanta-based 'crunk' MC and producer Lil Jon. This track combines a sparse, bass-heavy drum part with foregrounded mid-range synth figures that shift in and out of the mix in line with the succession of 'drops' that occur throughout the track's duration.[30] The overarching 'drop'-focused structure and the EDM-style 'lead' voice of the track, underpinned by the trap-like tempo and bass management, makes for a synthesis of EDM and contemporary hip hop that saw the single find broad commercial appeal. Such a crossover proved to be equally viable at a relatively underground level with the release of With You.'s 2015 single 'Ghost' featuring Vince Staples; this track is anchored by a pattern of lighter kick drums playing within the open spaces of a 'four-on-the-floor' pulse of weightier kick drums, giving Staples a firm, yet slightly lilting rhythm on which to perform his subtly morphing flows.[31] A Major Lazer remix of 'Ghost' increases the tempo significantly and introduces half-time 'drops' to cater to the needs of the modern EDM DJ;[32] this version completely repurposes Staples's vocal contribution, framing it with a melodic synth riff and sharp percussive sounds that evidence substantial digital processing and professionally handled, if rather uninspired, mixing. This treatment of Vince Staples as a vocalist has seen him operate beyond his usual role as a hip hop MC into a EDM/hip hop crossover artist, and then further into being a malleable voice for a bill-topping EDM outfit to manipulate, demonstrating that

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[30] DJ Snake And Lil' Jon, 'Turn Down For What' (Columbia, 2014).
[31] With You., 'Ghost (feat. Vince Staples)' (Big Beat Records, 2015).
[32] With You., 'Ghost (feat. Vince Staples) [Major Lazer Remix]' (Big Beat Records, 2016).

while music technology may be common across genres and styles in terms of the 'noun' dimension of technology, that is, the hardware/software devices that make music-making possible, it is still in the 'verb' dimension of technology, meaning the creative inclinations and techniques, that determines the differences between a genre crossover's constituent parts.

As beatmakers active on services such as BeatStars do not necessarily have to have personal connections with the artists who purchase the right to use their beats, the social aspect of collaboration that hip hop music has hinged on over its history is no longer as pronounced. In his study of sample-based beatmaking, belonging to the lineage of 'golden age' hip hop, Joseph G. Schloss explains that:

> Most producers work in partnership with one or more MCs (rappers), to whom they submit a number of instrumental beats. The MCs then choose the particular beats which they feel best suit their needs at that time.[33]

This arrangement has also existed in the production and release of free online mixtape releases, where MCs are free to rap on virtually any beat that they have access to, whereas official studio albums are typically more rigorously planned. However, this does not mean that record companies insist on controlling an album's stylistic direction or determining who produces tracks, even on mainstream releases. YG claims:

> you playing the music for 'em [record company executives] and then they just come in and they say what they say. But it don't be too much of that. Like, we don't let nobody come in and tell us. It really don't be people trying to come in and tell us stuff.[34]

YG and his principal creative partner DJ Mustard present themselves as a capable team that can handle its own projects, and one that represents a recognisable brand that hip hop fans can identify as dealing in 'real' hip hop without the need for label interference, much like how Snoop Dogg and Dr. Dre were considered the archetypal West Coast MC and DJ/producer pairing in the 1990s. For MCs and beatmakers who do not enjoy such

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[33] Joseph G. Schloss, *Making Beats: The Art of Sample-Based Hip-Hop* (Middletown, CT: Wesleyan University Press, 2012), 169.
[34] Ali Shaheed Muhammad and Frannie Kelley, 'YG: 'I Gave Y'all What I Seen'', *Microphone Check : NPR*, 2014, http://www.npr.org/sections/microphonecheck/2014/07/24/335019314/yg-i-gave-yall-what-i-seen (8th October, 2016).

close relationships however, questions arise regarding how collaborations should be pursued.

While the internet allows for beatmakers and MCs to collaborate without having to meet in person, there are some professional musicians, operating as hip hop beatmakers, who prefer to be in the physical presence of the MC they are working with when conceiving a hip hop track. To demonstrate, Kenny Beats explains his distinction between the terms 'beatmaker' and 'producer', where the former refers to a musician who simply makes a beat that can then be adopted by an MC upon completion, whereas the latter involves making a beat with a specific MC in mind, tailoring it to their style and allowing for their creative input.[35] Kenny Beats asserts that he is a producer and 'not a beatmaker', clarifying that:

> I get hit up all the time from every verified rapper with 1,000,000 followers like, "Yo bro! You got the sauce right now. Send me beats!" Naw, that takes everything away from what I do. As soon as I can't be in that room and have an opinion, I can't change the reverb on your vocals […] I'm not forfeiting that. Even if my favorite rapper calls and asks for a pack [of beats], I'd rather take that hit right now – even if that would have been a check or a big opportunity, because I know in six months I've got a full project with someone like Vince Staples coming out and you're gonna see the difference.[36]

To validate Kenny Beats's claims about his approach to professional hip hop production, listening to the 2019 Vince Staples album *FM!* reveals a cohesive sound across its tracks, adhering to the record's concept of playfully lampooning the standardised format and production values of modern rap radio.[37] The track 'Outside!' is especially engaging for the way its 808-like bass plays in rhythmic figures that link up with Staples's athletic flows, suggesting that the beat was worked on concurrently with the writing of Staples's vocal part, and the beat's secondary percussive elements, playing off a synth riff that maintains a pattern of sixteenth notes in a protractedly and granularly antiphonal manner, signal Staples's creative roots that are informed by the energetic region-specific style of hyphy which found popularity across coastal California.[38] The prevalence of creative relationships between beatmakers and MCs of the kind exemplified by Kenny

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[35] Schube, 'Kenny Beats is Hip-Hop Production's Prodigal Son'.
[36] Ibid.
[37] Vince Staples, *FM!* (Def Jam Recordings, 602577295430, 2019).
[38] Vince Staples, 'Outside!', F*M!* (Def Jam Recordings, 602577295430, 2019).

Beats and Vince Staples offers a further indication of EDM's firmly studio-oriented sensibilities being established in modern hip hop, going some way towards deconstructing the division of labour between the two types of musician. Purportedly, this situation can serve to encourage more exploratory and daring creative mindsets in collaborative production projects, as Kenny Beats reflects on his work with the relatively experimental underground MC JPEGMAFIA:

> JPEG asked for the most fucked up thing on my computer. I played him some hard beats, but he was like, "Naw, play me something you wouldn't play for anybody." I played it, I was so hesitant and embarrassed, but he was like, "That's it. Put an 808 on it." You gotta be open.[39]

JPEGMAFIA's desire for manic and off-kilter material to set his rhymes to sees him make his own beats. Indeed, most of the tracks on the albums *Veteran* and *All My Heroes Are Cornballs* were produced by JPEGMAFIA himself,[40] evidencing an independent streak that problematises any notion that modern hip hop production needs to be collaborative at all.

Beat Tape Culture

Operating outside the scope of recording musicians who focus their efforts into carefully planned major album projects, released infrequently with promotional and tour campaigns organised to support them, there are producers who make and share large volumes of completed tracks regularly and rapidly, refusing the standardisation of the 'album cycle' model in order to ensure that they are staving off creative stagnation and embedding their practice into their everyday lives as much as possible. Gustav Thomas, observing this type of producer, coins the term 'wild productivity' to describe this impulse:

> *Wild Productivity* has to do with an awareness that not only is the proliferation of new music in the digital environment increasing exponentially as the technology for producing it

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[39] Schube, 'Kenny Beats is Hip-Hop Production's Prodigal Son',
[40] JPEGMAFIA, *Veteran* (Deathbomb Arc, dba189, 2018).
JPEGMAFIA, *All My Heroes Are Cornballs* (EQT Recordings, 2312118685, 2019).

becomes more accessible and easier to use, but that such accessibility and facility mean that emerging artists are increasingly likely to produce new material at an exponential rate.[41]

Such a restless, relentless creative drive is discernible in the work of Lil Wayne, who released several albums and mixtapes throughout the 2000s, made possible by his habit of writing and recording whenever his schedule allowed; this can be seen in the documentary film *The Carter*, as Wayne is seen tracking vocals in a hotel room in Amsterdam around the time of the release of his album *Tha Carter III*.[42] In order to sustain and archive the outputs of a tendency like Lil Wayne's, hip hop artists have required robust online platforms to function as homes for their creative personae – virtual 'places' that perform the roles of discography and living repository simultaneously. Among the more noteworthy websites is DatPiff, which since 2005 has dealt exclusively in the distribution of online mixtapes, including Lil Wayne's popular 'Da Drought' and 'Dedication' series. Through mixtapes released on DatPiff, MCs have been able to release digital collections of rawer, more freewheeling tracks that might otherwise be too divergent from orthodox pop song structures and bereft of hooks for record labels to consider for inclusion on conventional commercial albums. As DatPiff's vice president Kyle "KP" Reilly argues:

> We really forced labels to give artists back that freedom, instead of just the usual, "You gotta turn in an album three months beforehand. It's gotta be approved by us, you've gotta have two or three radio-approved records on there, and the features have to be signed off by us or planned by us." It really put the control back in the artists' hands.[43]

As the popularity of the mixtape release format plateaued, evidencing an appetite for collections of recorded tracks that were executed in the spirit of underground hip hop culture's tropes of freestyling and battling, record labels devised the 'commercial mixtape', that is, a release that resembles a mixtape in terms of its content, but is distributed through digital download and streaming platforms that facilitate monetisation and might even receive a physical release.[44] This represents a further,

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[41] Gustav Thomas, 'Wild Productivity in the Age of Evaporation: A Brief Outline in Self-Situation', *Claws & Tongues*, 2016, https://clawsandtongues.wordpress.com/2016/11/06/wild-productivity-in-the-age-of-evaporation-a-brief-outline-in-self-situation (31st March, 2017).

[42] *The Carter*, by Adam Bhala Lough, 2009, 75 min. (DVD, QD3 Entertainment).

[43] Kemet High, ''We're Still Here and Stronger Than Ever': How DatPiff Found Its Niche', *Complex*, 2019, https://www.complex.com/music/2019/10/datpiff-niche-interview-kp (5th February, 2020).

[44] An example of a 'commercial mixtape' is Drake's *If You're Reading This It's Too Late*, which has been certified 2x Platinum in the United States.
Drake, *If You're Reading This It's Too Late* (Cash Money Records, 2015).

micro-level appropriation of underground hip hop culture by the culture industry, though underground artists continue to produce free mixtapes without the involvement of record labels, as Reilly claims: 'Mixtapes haven't gone anywhere. They've just become legitimized by labels. That's what we forced'.[45]

Schloss posits that most hip hop tracks that are made to be released to the public are subjected to a kind of quality control that is oriented by: 'perceived danceability, ability to fit into preexisting radio formats, and "catchiness," most of which are highly subjective'.[46] Despite this, assuming we are prepared to accept Schloss's deduction, there are beatmakers who produce gluts of more exploratory beats through the maintenance of regular practice and wide listening; a large quantity of these beats may not end up being used by MCs for commercially-released hip hop tracks. Moreover, many beats are composed specifically to remain as instrumentals so that compromises do not have to be made in order to accommodate vocal parts at all. Schloss acknowledges that such a mode of production exists by venturing that there are types of beats that are made for the purposes of 'personal listening', contrasting with beats produced with the club in mind.[47] The impetus of this approach to beatmaking has even formed the basis of a musical genre in and of itself, namely trip hop, as Simon Reynolds describes:

> Designed for headphone-listening as opposed to parties, reverie rather than revelry, trip hop retains the musical essence of hip hop – breakbeat-based rhythms, looped samples, turntable-manipulation effects like scratching – but takes the studio wizardry of pioneering African-American producers like Hank Shocklee and Prince Paul even further.[48]

Although trip hop is considered to be a largely British development of the 1990s, among its most definitive records is the album *Endtroducing.....* by the American producer DJ Shadow, which extends hip hop's aesthetic dimension of layering into sonic territories comparable to those of the alternative rock subgenre shoegaze through its opaque assemblages of samples.[49] *Endtroducing.....*, as a beatmaker's solo album, set the

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[45] High, ''We're Still Here and Stronger Than Ever''.
[46] Schloss, *Making Beats*, 175.
[47] Ibid., 191.
[48] Simon Reynolds, *Energy Flash: A Journey Through Rave Music and Dance Culture* (London: Picador, 1998), 314.
[49] DJ Shadow, *Endtroducing.....* (Mo Wax, MW059, 1996).

precedent for the contemporary format that today's underground beatmakers use to share their instrumental output: the online beat tape. Essentially, this type of release is the solo beatmaker's equivalent of the MC's (non-commercial) mixtape, with the term's inclusion of the word 'tape' working to signal an alignment with underground hip hop's lineage as captured in the cassettes containing recordings of live sets from parties in the South Bronx that circulated in the 1970s and 1980s and the demo tapes of 1990s sample-based beatmakers. In an attempt to tap into the flow state of 'wild productivity' so that I could hone my beatmaking workflow and style in advance of conceiving my project's creative practice component, I started a routine of composing a sample-based beat every day, culminating in the compilation of my 2016 release *A.M. Beat Tape*.[50] Shortly after I released this beat tape online, it was featured on the website Beat Tape Co-Op, a resource that publishes blog-style pages featuring track lists, artwork, and an embedded audio player for each beat tape the site's ownership deems worthy of showcasing.[51] In monitoring Beat Tape Co-Op, I have found that the majority of the releases it features are hosted on the download-oriented music platform Bandcamp.

Launched in 2008, Bandcamp is a digital distribution solution for small record labels and independent artists, with the website publishing regular articles covering new releases of a variety of genres, including underground hip hop, in order to aid artists with extra publicity and position itself as among the internet's most bountiful sources of underground or otherwise previously undiscovered music.[52] Beatmaker Cuth explained to me that he favours Bandcamp because of its built-in functionality that allows for listeners to purchase digital downloads (as well as physical products like vinyl records and CDs) from artists directly, with Bandcamp taking only a small cut:

DJ Shadow's connection to the movement of trip hop (actualised through the UK-based label Mo Wax) is affirmed by journalist Andy Pemberton's article on the subgenre for Mixmag published in June 1994.
Andy Pemberton, 'Trip Hop', Mixmag, 1994, https://www.webcitation.org/6G7GDQIEu?url=http://www.mixmag.net/words/from-the-archives/classic-features/june-1994---trip-hop (11th June, 2021).
[50] b-cátt, *A.M. Beat Tape* (Self-released by b-cátt, 2016).
[51] 'Dedicated Solely To Producers & BeatMakers', *Beat Tape Co-Op*, 2018, http://beattapeco-op.com/ (5th February, 2020).
[52] Phillip Mlynar, 'The Best Hip-Hop on Bandcamp: January 2018', *Bandcamp Daily*, 2018, https://daily.bandcamp.com/2018/02/02/the-best-hip-hop-on-bandcamp-january-2018 (5th February, 2018).

your listeners can buy digital or physical directly from you. You can also stream on there to hear what you're getting. I distribute to spotify/ itunes and all that, but bandcamp feels more direct […] I feel like if people want to support directly they'll use bandcamp. I want my music to be widely available so I try to have it everywhere. I do pretty well on soundcloud which is good for reaching more ears, but you don't see a penny from that.[53]

On the same issue, Nikk Blakk notes that he values the high level of control that Bandcamp affords artists in the ways that releases can be presented and sold;[54] in practical terms, this is to do with artists being able to manage the track titles, artwork, liner notes, and other, peripheral types of content as they appear on a release's page and in its download's ZIP archive file, and additionally, the prices – for both individual track downloads and full album downloads – can be set to anything the artists want.

Due to its existence being geared primarily towards hosting complete digital albums, Bandcamp is not the only online platform that producers of beat tape releases use. Hot Science, addressing how he supplements his presence on Bandcamp, states:

I use Soundcloud and Mixcloud as well. Every platform serves a different purpose to me. Soundcloud is more "social", with commenting, reposting, visible play count, etc. I use mixcloud just for live sets or longer mixes.[55]

These platforms serve to satisfy Hot Science's need to gauge how his work is being received, which Bandcamp offers only limited scope for. Bandcamp's functionality is also inappropriate when beatmakers seek to sell beats to MCs in addition to publishing beat tapes; Nikk Blakk, for example, uses BeatStars to advertise the beats he is looking to sell: 'It's better for leasing beats than Bandcamp, which is why I reserve Bandcamp for posting my projects rather than beats for people to rap/sing to'.[56] Thus, I have found that Bandcamp is considered a place for an underground beatmaker's more exploratory musical endeavours, where they can present uncontaminated long-form manifestations of their practices that stand apart from the concern of producing and selling individual beats that might appeal to MCs looking to produce completed hip hop tracks with

[53] Cuth, personal communication (2nd February, 2018).
[54] Nikk Blakk, personal communication (16th March, 2018).
[55] Hot Science, personal communication (15th March, 2018).
[56] Nikk Blakk, personal communication.

commercial potential. Many beatmakers who use Bandcamp to host their releases opt

not to sell individual beats at all; Hot Science explains:

> I have never sold a beat. Not that I haven't had offers, but I was always more interested in creating together with people than with selling. These days, most of my stuff is a little too "weird" for anyone who is buying. I feel most people buying beats these days are looking for more mainstream sounding beats which I have no interest in. Not that i don't like mainstream, I just don't care to make it.[57]

Hence, the Bandcamp-released beat tape can be considered a workshop for the modern

underground beatmaker – a project type that constitutes a discernible musical style in its

own right and allows for wide-ranging experimentation.

Although the reception of DJ Shadow's *Endtroducing…..* constituted a watershed moment

for beatmaking for it being a commercially successful and critically acclaimed album of

beats that are not accompanied by MCs, it deviates from hip hop's sensibilities through

its lengthy individual tracks that are made up of multiple discrete sections. For this

reason, coupled with internet culture still being in an embryonic state in the late 1990s, it

did not kick off a trend of existing underground hip hop beatmakers producing their own

collections of unaccompanied beats. I suggest that this trend occurred a decade later,

when the revered late beatmaker J Dilla released his album *Donuts* – a collection of

thirty-one beats that, like his output as a member of the group Slum Village, were

decidedly hip hop in character, providing a blueprint for the underground online beat

tape releases that now populate Bandcamp.[58] *Donuts* was not the first collection of

instrumentals that J Dilla had released, but it was the first to make a significant impact on

hip hop culture at large as it captured the attention of hip hop fans and beatmakers alike

on the back of it being released only three days before J Dilla's death in February 2006.

Concerning Dilla's influence on the practice of making instrumental beats, John Song

ventures:

> it wasnt just dilla […] but when he released donuts i think that changed the game for a lot of beat makers […] there were a lot of people making beats for the sake of producing music with rappers, but i think dilla helped pioneer the beat maker genre.[59]

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[57] Hot Science, personal communication.
[58] J Dilla, *Donuts* (Stones Throw Records, STH2126, 2006).
[59] John Song, personal communication (28th November, 2017).

This comment, through its use of the word 'genre', affirms that the modern online beat tape format exists as an autonomous style within hip hop beatmaking in general, with J Dilla as its key historical figure.

A recurring theme that I registered as I interviewed beatmakers was that when asked if they could describe their personal styles, the word 'soulful' was often used, with contemporary sample-based beatmakers such as 9th Wonder and Alchemist – as well as many artists working in instrumental hip hop releases who are signed to the Stones Throw label that J Dilla released much of his solo work on – cited as primary influences. Both Cuth and Juma were particularly keen to assert that they were working towards achieving a 'soulful' sound that allowed for 'harsh' and 'gritty' sonic elements as opposed to smoothing them over, though Juma also stated that his approach was 'Definitely NOT lo-fi' in a rebuke of the 'lo-fi hip hop' style that has become popular by way of internet presences like the long-running popular 'lofi hip hop radio - beats to relax/study to' live YouTube stream.[60] This invoking of 'soul' demands some critical attention; one could rather easily regard it as beatmakers making hackneyed claims of authenticity by distinguishing their own raw and usually home-produced sample-based beats from the polished and professional studio-produced beats of modern commercial hip hop records, but I believe it is more illuminating to consider hip hop's debts to soul and funk music in general. The James Brown track 'Funky Drummer', the source of one of early hip hop DJing culture and 'golden age' sample-based beatmaking's most famous and widely-used breaks, spells out a kind of manifesto that has guided the continuum of black American popular musics since the 1970s with Brown's verbal address to his band:

> Fellas, one more time I wanna give the drummer some of this funky soul we got here. You don't have to do no soloing, brother, just keep what you got. Don't turn it loose, 'cause it's a mother.[61]

Following this address, after two more stanzas of lyrics, Brown counts 'one, two, three, four, get it!' and the band falls silent except for drummer Clyde Stubblefield. Brown's

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[60] Cuth, personal communication.
Juma, personal communication (2nd February, 2018).
'lofi hip hop radio – beats to relax/study to', *YouTube*, 2018, https://youtu.be/hHW1oY26kxQ (12th February, 2019).
[61] James Brown, 'Funky Drummer' (King Records, 1970).

demand of 'no soloing' results in a steady, but infectious rhythm without unnecessary embellishment, and the phrase 'don't turn it loose' implores Stubblefield – and the hip hop DJs and beatmakers who loop this section of the record by extension – to sustain the beat indefinitely because 'it's a mother', meaning it is tapping the very root of black American musicality through its repetitive and polyrhythmic nature.[62] Thus, I understand the pursuit of a 'soulful' sound in the production of modern beat tapes as channelling this same spirit. In Cuth's 2018 beat tape *BRUTALIST*, drum parts are foregrounded in the mixes of the beats through a heavily compressed sound, often to the detriment of sonic fidelity, but serving to cement the kicks and snares as the track's main elements while melodic and textural samples duck in and out of the open spaces, assuming only secondary, background roles.[63] Although Brown may not be named by underground beatmakers as a direct influence, he continues to loom large over hip hop style for his radical minimalism; it is the drive to be economical with limited sets of musical materials, without an aversion to 'harsh' timbres and distortion, that encourages beatmakers to fill their beat tapes freely.

Around the time that my interviews were conducted, I was eager to learn if modern underground beatmakers associated themselves with local musical scenes, or if their locales influence or inspire them in any way. Cuth, outlining how he feels his home city of Brighton shapes his musical activities, acknowledges a local hip hop scene that revolves around numerous record shops for crate-digging and club nights for socialising, and indicates that the 'relaxed' pace of life he enjoys in the coastal city has a noticeable effect on his beats.[64] This response, largely geared towards the practical aspects of being an active beatmaker in a city, suggests that crate-digging continues to feature as a part of underground hip hop culture, but does not hint at Brighton having an identifiable sound. I asked the same questions to the American beatmakers I interviewed – two from Atlanta, two from Milwaukee, and one from Chicago – with a view to evaluating the extent to which the tendency of disparate regions exhibiting disparate sounds in hip

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[62] James Brown, 'Funky Drummer' (King Records, 1970).
[63] Cuth, *BRUTALIST* (Gohan Tapes, GO 011, 2018).
[64] Cuth, personal communication.

hop's home country has persisted. John Song, whose home city of Atlanta has spawned the expansive, multi-faceted production values of the Dungeon Family and the genesis of the 808-led trap style, states:

> Outkast and the whole dungeon family has probably had the biggest influence in my music when it comes to Atlanta... but TBH in this day in age home is just a place where i rest my head. i dont think about it too much.[65]

Similarly, Nikk Blakk, also from Atlanta, notes that: 'I don't think it [Atlanta] has a big influence on my beats. Atlanta rap has become more mainstream, so I think the sound's basically universal as of right now'.[66] As commercial hip hop from across the United States and beyond adopted trap as a standardised beatmaking style, its association with Atlanta – and the South more broadly – has diminished significantly; this development has seen contemporary Southern beatmakers like Nikk Blakk bypass any consideration for representing where they are working from, instead opting to nurture more individual, idiosyncratic beatmaking styles. Hot Science, responding from Milwaukee, is blunter still in his assessment of how much his home city influences his beats, asserting that: 'I can safely say my location does not influence my beats, nor has it ever'.[67] Such an emphatic rejection underlines that modern hip hop music, including that which exists at an underground level, is typically not coloured by notions of place – indeed, it may even actively push against them. Nevertheless, beatmakers may still find that their experiences of their places can be channelled into their creative practices in more oblique ways; Juma, based in Chicago, explains:

> The weather, especially right now, is pretty much always shitty unless it's the summer. You just kind of get used to it though. It's just really comfortable. Taking trips downtown while snowing or raining has always put me in a better mood than sunshine, just because it's real. I use images of the stuff I see in car rides with my friends as reference for my music all the time.[68]

Like Cuth, Juma's observance of his location being pertinent to his practice is rooted in the practical ramifications of creativity, though while Cuth's is firmly materialistic for citing record stores to dig in and club nights for sustaining the local scene, Juma's is more idealistic in how it hinges on his own musical imagination – he does not claim to be

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[65] John Song, personal communication.
[66] Nikk Blakk, personal communication.
[67] Hot Science, personal communication.
[68] Juma, personal communication.

involved in any of Chicago's local scenes or styles like drill or footwork, but uses his visual experiences of the city as creative prompts. Furthermore, the manner in which he regards road trips as part of his creative process aligns his practice with hip hop culture's historical romanticising of cars and motoring, where the synergy between human and machine is mirrored by the harnessing of technology that DJing and beatmaking entail. For Milwaukee-based beatmaker Cold Lunch, learning how to negotiate the technological dimension of beatmaking has been most important to his practice, as he reflects:

> i heard liam from the prodigy's breezeblock mix for radio one […] and the beasties' hello nasty and saw this incredible documentary called scratch, and all of those things made me really want to get into it [beatmaking], but i didn't understand how to do it. i got a sampler in 2009 but was really using it to make ambient/drone music, and it wasn't until 2015 that i started thinking about making sample based music […] by that point, i had heard so much music and acquired so much knowledge on the process of others that it gave me a better understanding of how to approach it.[69]

By his broad, persistent listening and enquiry into how music technology hardware has been operated by his favourite producers, Cold Lunch was able to expand the scope of his musicianship and find motivation to start making his own beats that could emulate the 'fearlessness' that he perceived in his influences, stemming from the freedom to 'just do whatever you want' with music technology.[70]

I suggest that beatmakers who produce online beat tape releases are working in a particularly exploratory area of hip hop music for their incorporation of a diverse range of musical materials extracted from a variety of types of music technology, contrasting with the more conservative approaches of sampling-oriented hardware purist beatmakers at one side of the continuum and modern software-based producers of commercial hip hop beats at the other. Cuth states that for fifteen years, various versions of FL Studio have formed the basis of his beatmaking setup, with a generic MIDI keyboard and an Akai MPD (a 4x4 drum pad style controller) used for inputting note data, but in recent years he has embraced a hardware-based system through his acquisition of an SP-202, SP-303, and SP-404 – all belonging to Boss/Roland's family of sampling workstations.[71] By coveting the

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[69] Cold Lunch, personal communication (18th February, 2018).
[70] Ibid.
[71] Cuth, personal communication.

tactile workflow of the SP series hardware samplers and the 'crusty' sound quality that characterises these machines,[72] while also wishing to keep the same substantial degree of control over his mixes that DAW software affords, Cuth has realised a hybrid setup that disregards any notion that stringent distinctions of hardware versus software or 'retro' versus modern need to be observed in beatmaking practice. The appetite for this type of setup, demonstrated by beatmakers who may not have access to professional recording studios with abundant equipment, is what has sustained the viability of Maschine by Native Instruments, a music production system purporting to combine the best features of hardware and software that is used by the beatmakers Hot Science and Juma.[73] This represents an ongoing effort by technology companies to capitalise on underground music-making by identifying and then offering what beatmakers need at relatively affordable prices. John Song, explaining how his beatmaking setup has changed, specifies that he now uses an entirely software-based setup running the DAW Ableton Live, whereas previously he used software in conjunction with an Akai MPC1000; the reason behind this was simply financial – the MPC is a highly prized piece of hardware to many producers for its place in hip hop and other forms of electronic music, and John Song needed the money.[74] The increasing cost of classic, discontinued beatmaking hardware devices has seen music technology companies who deal mainly in software to emulate the sounds and control layouts of these machines in their instrument/effects plugins; while software of this kind is unlikely to satisfy purist sample-based hip hop beatmakers, I have found that it is considered acceptable, even desirable, by producers of online beat tapes who have a more flexible attitude towards music technology.

Another of my key interview questions was to do with how online beat tape producers get started with making a beat. The first element to be introduced to a new beat project

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[72] Cuth, personal communication.
The 'crusty' sound Cuth refers to is a consequence of the sample rates and effects that the SP series samplers offer, with the SP-202's 'hi-fi' sample rate setting being only 31.25 kHz, and the SP-404 featuring effects that can distort and filter sounds to emulate the sonic characteristics of older music technologies.
[73] Hot Science, personal communication.
Juma, personal communication.
[74] John Song, personal communication.

can indicate the beatmaker's own compositional priorities, or might otherwise serve as a device to assist the beatmaker in imagining what further elements could be introduced as a simultaneously-sounding answer, instigating a polyrhythmic composite. John Song states that his initial focus is on drums:

> i used to always start with finding the sample but for the past year ive started (almost) every beat with the drums […] laying a good foundation for something the people can vibe/dance to and then laying stuff on top.[75]

This is echoed by Nikk Blakk, who has also transitioned from starting with pitched materials to composing drum figures first, which he claims has 'opened up' his practice.[76] An approach that sees a drum part introduced to a new beat before anything else means that the drums can play in any rhythmic pattern the beatmaker feels without having being influenced by any other sonic element or having to worry about matching or complimenting the rhythmic impetus of an existing loop. This is congruent with hip hop's history as a music that is carried largely by rhythm, with its roots being in the isolation and looping of breaks. Despite this, there are other beatmakers who opt to begin not with a drum pattern but with a sample. Hot Science reflects:

> These days, 95% of the time, I start off with a sample of something. A song, a synth line, a YouTube conspiracy theory video; do some mangling and go from there. Sometimes, the sample I started with won't even end up in the final product. Always a good springboard though. I used to start with just a drum beat, but I never do that anymore.[77]

That the samples Hot Science selects in advance of the processes of programming and mixing do not always feature in a completed beat confirms that, to his practice, samples can be more like 'springboards' than musical devices that are fundamental and inalienable. Cuth too prefers to begin his creative process by using samples, though when it comes to programming, the drum part is still the first element to be committed:

> For me it all starts with a good sample. Once I have something I can sample I normally try to chop it up, get some drums down, then lay over the samples and build from there. My beats are typically: Drums, samples then a synth bassline.[78]

The online beat tape producer's predilection for working with samples means that sample acquisition activities remain relevant to hip hop beatmaking culture; like with

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[75] John Song, personal communication.
[76] Nikk Blakk, personal communication.
[77] Hot Science, personal communication.
[78] Cuth, personal communication.

modern software-based production tools, much material that is eminently suitable for sampling can be found online, but there are still beatmakers who maintain that crate-digging in physical spaces is an integral part of their practice.

Cold Lunch, answering the question of how he gets started with making a beat, places an emphasis on his crate-digging activity, intimating that his beatmaking process effectively begins before he even touches his equipment:

> i go record digging a lot, especially on weekends. i have a portable turntable i take with me because i buy a lot of cheap records from thrift shops, and i have no way of knowing what's on them without it. […] if i've bought a record, i've already decided what i'm going to use on it. so i'll essentially find the sample, figure out where i want to pitch it, if i want to chop it, etc. […] sometimes i'll be digging and find something that will work with something i've been working on.[79]

By searching for recorded sounds that he can sample through playing records during his thrift shop visits, Cold Lunch is engaging in a kind of creative listening that is integral to his beatmaking; while he could also find sounds to sample using the internet, his visits are considered essential for how they determine the nature of his creative affordances and imbue his musical experience with a ritualistic meaning – his finds are more gratifying for being hard-won.[80] Cold Lunch's self-titled beat tape, released in 2018, comprises a collection of tracks that were originally produced as personal studies in how to operate his newly-acquired hardware, namely the SP-202, SP-303, and SP-404 samplers, made up of samples derived from records and cassette tapes that were bought for no more than $2 each.[81] Rather than seeking expensive records that are coveted by DJs and other sample-based beatmakers, Cold Lunch prefers to source cheap records with the rationale that: 'a lot of these cheap records are things that people pass up, so for me, it's great because i know that it's likely never been sampled'.[82] This insistence on originality, pursued by finding creative potential in cultural cast-offs, represents the potency of hip hop music as it crystallised in the parties of the South Bronx in the 1970s; it is in this spirit that I have attempted to go about completing my research through a

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[79] Cold Lunch, personal communication.
[80] Ibid.
[81] Ibid.
[82] Ibid.

beat tape project of my own, drawing from my prior musical experience and what I have learned from studying the work of other contemporary underground beatmakers to harness media and technologies that have, up until now, been largely untapped by hip hop beatmakers.

Hexagrammar

Acting on my view that music operates by communicating emotional resonances in a way that breaches the limits set by language, I went about the creative practice component of my research project with a view to demonstrating how the medium of the hip hop beat can be used as a conduit for a multiplicity of different prevailing feelings or contrasts and transitions between feelings. This concern has been acknowledged by the beatmaker El-P, who ventures:

> We all have different modes as producers; in our heads I think we're all the same […] we have a slowed-down mode, we have a fast mode […] you look at them differently and approach them differently […] I love them both, I love all different modes of making beats […] There should be a mood – there should be something that alters and shifts and changes and takes you somewhere […] I think that's kind of one of the things that makes producers great, if you can navigate all that.[83]

Before embarking on the production of my beat tape, *Hexagrammar*, I devised a scheme for a practice that engages such beatmaking 'modes', directed by 'moods', involving the systems of classical Chinese philosophy's *Book of Changes,* or *I Ching*. The *I Ching*'s purpose is to articulate how every condition is temporary, always subject to change through counter-fixity. In the *Ta Chuan* – or 'Great Treatise' – section of the *I Ching*, the concepts of 'Creative' and 'Receptive' that are aligned with 'Heaven' and 'Earth' are regarded thusly:

> The two principles are united by a relation based on homogeneity; they do not combat but complement each other. The difference in level creates a potential, as it were, by virtue of which movement and living expression of energy become possible.[84]

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[83] 'Boots Talks with El-P for the Talkhouse Music Podcast', *Talkhouse*, 2015, http://www.talkhouse.com/boots-talks-with-el-p-for-the-talkhouse-music-podcast (2nd May, 2017).

[84] Richard Wilhelm and Cary F. Baynes (trans.), *The I Ching or Book of Changes*, (London: Routledge & Kegan Paul Ltd, 1968), 281-282.

It is by the divination of hexagrams as listed in the *I Ching*, done through a series of

chance operations, that I generated prompts to aid me in conceiving various musical-

emotional ideas. Naturally, my interpretations of the *I Ching*'s directions were to be

coloured by the technologies that I selected for the realisation of my project; the

consideration of this materialistic aspect in my approach to beatmaking served as a

counterweight to realise a dialectical balance in my creative practice's philosophical

foundations, the maintenance of which I deemed critical to the success of *Hexagrammar*.

As is common in modern hip hop beatmaking, my practice makes substantial use of

elements like synthesised bass sounds and drum samples (taken from the Roland TR-808

and 'open' breaks) in addition to samples from video game soundtracks. However, to

advance my concept of video games technology being signified on to become a set of

resources for beatmaking, I sought to discover more sophisticated ways of tapping the

latent musical potentials of 'retro' computers and consoles. The principal electronic

sound chips that I have studied and featured in *Hexagrammar* are the 8580 SID (housed

by the Commodore 64), the SN76489 (housed by the Sega Mega Drive, Sega Master

System, and Sega Game Gear), the YM2612 (housed by the Sega Mega Drive), and the

SPC700 (housed by the Super Nintendo Entertainment System).

The main hardware platform that I engage with as a demoscene musician is the

Commodore 64. Using a range of tools that are native to the computer itself and cross-

platform in character (that is, operated on one platform, i.e. a modern PC system running

Microsoft Windows, to produce an executable program that can be ran on another), I

program sound and music that can be played on the Commodore 64's SID chip. For

Hexagrammar, I opted to use *GoatTracker*, a cross-platform tracker that allows the user

to design sounds using tables for waveform data, pulse-width data, and filter data, and

then subject these sounds to sequences of composed patterns.[85] For my beat '10', I

incorporate an arpeggiating pattern that plays across all three of the SID's channels to

realise a manually programmed 'delay' effect. Once looped, this pattern is joined by a

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[85] Öörni, Lasse, *GoatTracker* (Covert Bitops, 2018).

percussive element that plays at the same brisk, steady pace of sixteenth notes to produce an energetic layer of sound, under which a contrasting pairing of heavily syncopated bass and drum figures play. Capitalising on the SID's filtering capabilities, '34 to 5' features a rhythmic, single-note bass line which alternates between two bars of a 'dry' pulse wave sound and two bars of the same sound with a low-pass filter applied and the cutoff frequency decreasing over the durations of each note, foregrounding the dimension of timbre by establishing a regular, repeating rhythm and staying on a single pitch, but offering development by modifying the internal grain of the sound. The production of these two beats saw me channel my knowledge of the SID's workings and experience operating *GoatTracker* into a sonic framework that is workable in hip hop, benefiting from the chip's robust sounds and expansive adaptability.

Fig. 6.2 – *GoatTracker* song file for the soundtrack of the demo *Fight!*

While the Commodore 64 was a highly influential home computer system that received a large number of 'ports' of arcade games in the 1980s, its architecture, including the SID chip, did not feature in actual arcade cabinets, thereby making it relevant to only one side of the video gaming culture of its time. The arcades of the 1980s were filled with shrill washes of sounds produced by PSG (programmable sound generator) chips, mostly variants of the AY-3-8910 produced by General Instrument. These chips offer three channels of pulse wave sound and one noise generator, making for a very simple system which did not offer the same scope for sound design as the SID, but could nevertheless be manipulated to produce polyphonic, melody-oriented tunes. As a prolific developer of arcade titles, Sega constructed proprietary arcade systems that could accommodate multiple titles designed specifically to run on them, featuring the Texas Instruments SN76489 that has very similar functionality to the AY-3-8910. To invoke the sound of the 1980s arcade in *Hexagrammar*, I used the virtual instrument *Super PSG*, a software emulation of the SN76489 by the developer Aly James.[86] This tool, featuring a graphical interface based on the design of Sega's Master System console,[87] can be used as part of a DAW system, allowing musicians who may not necessarily have the technical knowledge of a programmer to realise a classic 'chiptune' sound in their work. My beat '9 to 61' incorporates a light, serene arpeggiating pattern of sixteenth notes played through the *Super PSG*, and on beat '45', using a technique taken directly from the economical 'Western' tendencies of chip music composition, I composed sustained 'chords' existing on only one channel (as opposed to having multiple notes played simultaneously across multiple channels) through very rapid arpeggiating notes. These two beats harness the innate musical strengths of the SN76489, providing cyclic, canopied sounds, with the arpeggios of '9 to 61' having 'separated attack impulses' and those of '45' being more based on 'iteration', to refer to Denis Smalley's spectromorphological categorisations of sounds in terms of his 'attack-effluvium continuum'.[88] Hence, I found that despite its

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[86] James, Aly, *Super PSG* (Aly James Lab, 2014).

[87] Due to Sega basing its 8-bit home systems on its existing arcade technology, for arcade ports and original home-only titles, the SN76489 is the sound chip of the Master System and Game Gear, and also functions as the secondary sound chip of the Mega Drive.

[88] Denis Smalley, 'Spectro-morphology and Structuring Processes' in Emmerson, Simon, (ed.), *The Language of Electroacoustic Music* (London: The Macmillan Press, 1986), 72.

limited capabilities, the SN76489 can be manipulated as an effective beatmaking instrument in the right circumstances.

By the end of the 1980s, FM synth-based sound chips, principally from Yamaha, had been established as the standard in 16-bit arcade game systems, offering substantially wider possibilities in instrument design than the PSG chips that had been prevalent in the 8-bit systems that came before. In a bid to tackle Nintendo's dominance in the home video game market, Sega released the Mega Drive games console, a system that effectively transported the company's 16-bit arcade technology into the home, including FM synth sound courtesy of the YM2612 sound chip. This chip has six channels, four operators (two carriers and two modulators) per channel, and the ability to play 8-bit PCM (pulse-code modulation) samples; these affordances make for a versatile digital synthesiser that can be likened to Yamaha's popular DX7 keyboard instrument, giving it substantial potential as a musical material. With the bright sounds of Sega's 16-bit arcade boards and Mega Drive console being an eminently recognisable feature of video games in the late 1980s and early 1990s, I adopted them in *Hexagrammar* using the virtual instrument *FMDrive*.[89] This tool comprises a fully programmable software realisation of the YM2612 that can be integrated into a DAW and played like a traditional synthesiser instrument using a keyboard-based MIDI controller. On the beat '32 to 28', I used *FMDrive* to program a patch for a highly resonant and coarse pad sound, which I then subjected to a filter with a LFO (low-frequency oscillator) affecting its cutoff frequency and stereo panning position – this allowed for a steady, dark, and droning textural layer to reflect the Image of hexagram 32, *Hêng / Duration* (䷟):

> Thunder and wind: the image of DURATION.
> Thus the superior man stands firm
> And does not change his direction.[90]

Another feature of *FMDrive* is its ability to rip FM instrument data from ROM files of Sega Mega Drive software so that the user can compose using the same FM synth sounds as those heard in the platform's games. This has very important implications for my

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[89] James, Aly, *FMDrive* (Aly James Lab, 2014).
[90] Wilhelm and Baynes (trans.), *The I Ching or Book of Changes*, 127.

research project because it constitutes an oblique form of sampling, not of recorded sound, but of data, combining the principles of hip hop's necessarily derivative mode of creativity as guided by the trope of signifyin(g) and the unfixing of video games technology from hardware/software intended for consumption (electronic entertainment) into devices for creative production (i.e. music production). I use this functionality on beat '2' where I took a 'lead' synth patch from a tune featured on the game *Star Cruiser* to play a melodic hook,[91] and on beat '33 to 12' where I composed a three-channel polyrhythmic figure made up of the same rhythmic pattern starting on different beats and then looping, using three different synth sounds ripped from the Mega Drive game *World of Illusion Starring Mickey Mouse and Donald Duck*.[92]

Nintendo's answer to Sega's Mega Drive console came in the form of the Super Famicom, or SNES (Super Nintendo Entertainment System) as it is known in the West. The architecture of this 16-bit system represented a significant divergence from the other consoles and arcade systems that were prominent in the early 1990s, not least in terms of sound, since it featured a powerful co-processor designed by Sony known as the SPC700, which offers eight channels of 16-bit sample-based sound rather than FM synthesis. Upon starting a game from cartridge, all the samples used in its tunes are loaded into the system's memory; oftentimes, these samples, while matching the SPC700's allowance of 16-bit word length, would be tuned to play at sample rates as low as 8,000Hz so that they would take up relatively small amounts of data, as games developers were required to be economical with the limited storage capacities of the cartridges. This resulted in a sound that was lush and multifaceted for its ability to, at least theoretically, reproduce all kinds of voices and musical instruments, but also lacking in the high frequency detail that characterises both PSG and FM synth video game sound, making for a certain 'crunch' through additional audible noise. To unlock the musical potential of the SNES and introduce it to *Hexagrammar*, I went about extracting audio samples from ROM files of SNES game cartridges – both well-known and obscure – in

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[91] Arsys Software, Inc., *Star Cruiser* (Tokyo: Masaya, 1990).
[92] Sega Enterprises Ltd., *World of Illusion Starring Mickey Mouse and Donald Duck* (Hawyard, CA: Sega of America, Inc., 1992).

another digital crate-digging exercise. Once these samples were extracted, I used the virtual instrument *C700* by the Japanese developer Osoumen to play them across the notes of a MIDI keyboard controller;[93] *C700* comprises a software emulation of the SNES's SPC700 co-processor's sound output, including its reverb functionality, allowing for a final sound that is largely identical to that of SNES game soundtracks. For beat '30 to 21', I sampled kick and snare sounds taken from the game *Hagane: The Final Conflict*,[94] layering them with TR-808 kick and snare sounds to produce compound drum strokes that offer a 'golden age' hip hop mid-range saturation in addition to the 'warm' low end of the TR-808's kicks and the 'snap' of the TR-808's snares. The SNES sound is also channelled in the composition of more melodic figures, like in the refrain of beat '14 to 9' which fashions a 'lead' synth sound out of a sample from *The Legend of Zelda: A Link to the Past*, a video game soundtrack that is widely-celebrated for its rich quasi-orchestral tunes.[95] On beat '44 to 57', a snarling sample from *Super Metroid* is used as the basis of an instrument that plays an ominous, marching bass line in quarter notes to evoke the Image of hexagram 44, *Kou / Coming to Meet* (䷫):

> Under heaven, wind:
> The image of COMING TO MEET.
> Thus does the prince act when disseminating his commands
> And proclaiming them to the four quarters of heaven.[96]

Additionally, the change from hexagram 44 to hexagram 57 entails:

> Nine in the fourth place means:
> No fish in the tank.
> This leads to misfortune.[97]

My musical interpretation of this reading – a warning of sorts – sees polyrhythmic figures of lighter percussive sounds countering the steady, rooted throb of the *Super Metroid* SNES bass to convey the Image of the emergent hexagram 57, *Tui / The Joyous, Lake* (䷹):

> Lakes resting one on the other:
> The image of THE JOYOUS.

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[93] Osoumen, *C700* (Kyoto: Picopicose, 2014).

[94] CAProduction co., Ltd. and Red Company Corporation, *Hagane: The Final Conflict* (San Francisco, CA: Hudson Soft USA, Inc., 1995).

[95] Nintendo EAD, *The Legend of Zelda: A Link to the Past* (Redmond, WA: Nintendo of America Inc., 1992).

[96] Wilhelm and Baynes (trans.), *The I Ching or Book of Changes*, 171.

[97] Ibid., 173.

> Thus the superior man joins with his friends
> For discussion and practice.[98]

By sampling sounds ripped from instrument data on SNES cartridges, all sounds from all SNES game soundtracks become 'open', that is, I can sample specific sounds from these soundtracks without any contamination from other unwanted, simultaneous sounds; this is an ability that regular hip hop crate diggers, typically working in the acquisition of vinyl, cannot wield, evidencing how an effort to extend what 'sampling' might mean and how it might be done can present new creative possibilities, albeit ones that remain consistent with the spirit of signifyin(g) on technology that I regard as central to hip hop beatmaking.

In addition to my use of 8-bit and 16-bit video games technology, *Hexagrammar* also involves sounds produced using games and music production programs released on platforms that are capable of producing 'streaming' audio. One such music program is *Music* for the Sony Playstation;[99] this software allows the player to layer and sequence loops – both pre-programmed and composed by the player with the software's built-in set of instrument sounds. I used *Music* in the production of beat '49 to 36' (for a bass line and synth pads) and '32 to 28' (for percussion and synth riffs), composing figures by operating the software's controls and then recording them in my DAW where they were edited and sequenced alongside the beats' other elements. To accomplish and highlight a complex 'layering' in my beatmaking approach, unifying discrete typologies of sound and eras of music/video games technology, I open *Hexagrammar* with a track titled '1', informed by hexagram 1, *Chi'en / The Creative* (䷀), opening with a wash of synthesised noise ripped from the title *Final Fantasy VIII* for the Sony Playstation console,[100] opening a wide stereo field before the start of the beat proper. The foundation of '1' consists of a simple two-note bass line influenced by the beats of DJ Mustard for the rapper YG, programmed using the software *Korg DS-10*, a software synthesiser and step-sequencer native to the Nintendo DS handheld video games system,[101] and reinforced by the

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[98] Wilhelm and Baynes (trans.), *The I Ching or Book of Changes*, 224.
[99] Codemasters Software Company Limited, *Music*, (Liverpool: Jester Interactive Publishing, 1998).
[100] Square Co., Ltd., *Final Fantasy VIII* (Costa Mesa, CA: Square Electronic Arts L.L.C., 1999).
[101] Cavia, *Korg DS-10* (Tokyo: AQ Interactive, Inc., 2008).

rounder sustain of tuned TR-808 samples playing in a slightly different rhythm. Coming in at the same time as the beat's bass line is a drum part consisting of kick, snare, hand clap, and ride strokes sampled from the SNES fighting game *Killer Instinct*, which provides a coarse 'boom bap' quality. Like the bass part, this drum part is supported by TR-808 samples, which play underneath the kicks and snares so that these strokes penetrate to the front of the mix. Countering these principally rhythmic, gestural elements is a pairing of more textural sounds – a metallic-sounding percussive figure and a sustained, yet rapidly modulating dyad serving as a 'pad' that I programmed and then recorded from a Commodore 64. Finally, for a melodic motif that enters once the beat's groove has been established, I appropriated a twinkling FM synth sound ripped from the instrument data of the Sega Mega Drive game *Advanced Busterhawk Gley Lancer*.[102]

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[102] NCS Corporation, *Advanced Busterhawk Gley Lancer* (Tokyo: Masaya 1992).

Fig. 6.3 – Cover image for *Hexagrammar*

My use of this diverse range of video gaming platforms repurposed as musical materials on '1' is intended to embody a cipher, an all-encompassing circle of phenomena and concepts made to exist within a framework of musical repetition and the recycling of (now ostensibly obsolete) technologies. '1' is answered on the second half of *Hexagrammar* by '2', which is based on the negative hexagram of *K'un / The Receptive* (䷁); this completes a macro-level antiphony happening across both 'sides' of the beat tape, offering contrasting gestural and textural musical results through the use of a similar set of materials (Commodore 64, Sega Mega Drive, SNES, etc). Through *Hexagrammar*, I communicate what cannot be articulated sufficiently in words alone, though I attempt to do so regardless: imaginative hip hop beatmaking hinges on a drive

to signify on and thus reanimate existing technologies, recapitulating the fundamental aesthetics of hip hop culture by engaging in dialectical thought on the various levels of the creative process.

To aid the listener in making sense of *Hexagrammar*'s prevailing sound over its duration, I suggest that its combinations of sounds derived from disparate 'retro' sound chips – and modern software emulations of such chips – that are deployed in the virtual environment of a DAW system constitute a form of 'fakebit' musical practice. 'Fakebit', Marilou Polymeropoulou observes, refers to an advancement of the 'chiptune' scene that sees producers making music featuring sonic materials and compositional devices that were popularised by 8-bit and 16-bit video game soundtracks, but unlike the 'first generation' of 'chiptune' where the music plays on the sound chips of 'retro' games platforms, 'fakebit' involves the use of modern DAW software to allow for a multiplicity of channels and the use of as many virtual instruments as is desired.[103] The distinction between 'first generation' chip music and 'fakebit' (positioned by Polymeropoulou as 'third generation') has caused an antagonism based on a question of authenticity in the 'chiptune' scene, but this has waned in recent years, as 'fakebit' has proliferated to the point where 'chiptune' now exists as a genre defined by the sound and musicality of its *product* as opposed to the techniques that characterise its *process*.[104] Additionally, Polymeropoulou notes that 'fakebit' musicians construct complex personal ideologies that are informed by cultures linked to punk, video games, and the demoscene;[105] this is significant to *Hexagrammar* because it is rooted in the common ground between my creative interests and investments of underground hip hop styles and contemporary chip music, with both being to do with finding new musical potential in ostensibly outdated sound sources and technologies.

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[103] Marilou Polymeropoulou, 'Chipmusic, Fakebit and the Discourse of Authenticity in the Chipscene', *WiderScreen*, 1-2 (2014).
[104] Ibid.
Some 'chiptune' musicians find that the label 'fakebit' remains too much of a pejorative and have proposed alternative terms like '9-bit', which wryly suggests a style that is a technologically advanced version of '8-bit' chip music.
[105] Polymeropoulou, 'Chipmusic, Fakebit and the Discourse of Authenticity in the Chipscene'.

Another key component of *Hexagrammar*'s sound is its refiguring of the hard funk that provided early hip hop's DJs with their most-valued materials that knowingly places a stronger emphasis on playing with musical time and virtual acoustic space. After some consideration, I have named this approach 'pan-dimensional funk', as I select disparate sounds and then mix them on the stereo field in ways that are not necessarily perceptible to the listener in an immediate way. All the while, rhythmic impetus is maintained by stressing the first beat of the bar, performing a digitally-realised translation of James Brown's 'on the one' slant. This strategy relates to my research's consideration for the possibility of a phenomenological mode of musical listening in the reception of hip hop beats. Thomas G. Porcello ventures:

> the inner time of the musical work, largely attributed to the textual manifestations of the composer's agency, draws the beholder into participation with the composer's stream of thought in a "polythetic" fashion, that is, as a step-by-step process.[106]

Through the beats of *Hexagrammar*, I endeavour to promote the idea that the listener can hear antiphony between simultaneous sounds from within looping figures in a way that allows them to speculate on how the sonic assemblages might have been constructed – what transpires is a sort of virtual quasi-social exchange between the listener and myself, as I invite them to listen creatively rather than passively. The beats '14 to 1' and '56 to 22' from the second half of *Hexagrammar* provide the most definitive statements of 'pan-dimensional funk' as the beat tape approaches its conclusion; sampled breaks were selected for their especially strong first kick drum hits, with programmed bass lines playing in rhythmic patterns that operate in counterpoint against the heavily syncopated drum figures. To propose a succinct definition of the beat tape's sound, then: *Hexagrammar* exists between an axis of timbre that draws heavily from multiple eras and technologies of video games hardware and an axis of rhythm coloured by the most kinetic contributions of black American music's historical continuum.

In terms of how *Hexagrammar* relates to the broader context of beatmaking in contemporary hip hop, I contend that my beats are exemplars of how celebrated

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[106] Thomas G. Porcello, 'Tails Out: Social Phenomenology and the Ethnographic Representation of Technology in Music Making' in Lysloff, René T. A. & Gay, Leslie C., (eds.), *Music and Technoculture* (Middletown, CT: Wesleyan University Press, 2003), 264-289 (273).

underground region-specific styles are recapitulated and expanded by today's producers, engendering further hybridity in beatmaking style while allowing artists to signal their knowledge of and reverence for hip hop's vibrant musical history. This tendency is evidenced in a video from the YouTube series The Cave hosted by Kenny Beats that features Atlanta-based rapper Key!. When Key! is asked what kind of beat he wants, he answers: 'I want some New Orleans shit'; Kenny Beats then proceeds to make a beat centred on the sampled 'bones' loop that carries much of the New Orleans bounce style, shifting its pitch down and chopping it into an alternative rhythmic pattern in order to devise a different spin on bounce's basic framework upon which 808-like bass hits.[107] My beat '43 to 29' also takes bounce as its point of departure but goes in a different direction by taking the 'Brown beat' drum break as its principal loop, with the 'bones' loop replaced by a riff of my own design composed using a bell-like FM synth patch taken from the Sega Mega Drive game *Aerobiz*.[108] Like Kenny Beats's beat for Key!, '43 to 29' demonstrates how subtle evolutions in style take place as beatmakers offer uncanny takes on existing models, that is, familiar sounds assuming unfamiliar forms, exercising technical approaches discovered through playful experimentation with music software. Moreover, there is scope to realise hybrid beatmaking forms comprised of existing underground styles, mixing region-specific sounds as freely as one might mix samples. On '31', I consolidate the influence of bounce that runs through *Hexagrammar* through a buoyant TR-808 percussion loop set against a texture of darker sounds derived from the Commodore 64, Commodore Amiga, and Nintendo Game Boy, with a steady sampled drum break anchoring the mix. What results is a beat that imagines the 'horrorcore' subgenre's sound – popularised by rappers like Kool Keith and producers like Necro – casting an ominous shadow over the polyrhythmic swagger of Mannie Fresh.

Summing up what *Hexagrammar* 'says' as it completes the totality of this thesis's contribution to hip hop studies is difficult; while I can hear and feel how my beats were composed using a procedure rooted in dialectical thinking, this is not likely to be

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[107] 'KENNY BEATS & KEY! FREESTYLE | The Cave: Episode 11', *YouTube*, 2019, https://youtu.be/46QhLAsWFxo (26 July, 2021).

[108] KOEI Co., Ltd., *Aerobiz* (Yokohama: KOEI Corporation, 1992).

registered and appreciated by the listener unless they have read the text for which the beat tape is a compliment to. Nevertheless, I maintain that *Hexagrammar* would not exist had it not been for my chosen approach, and the broad sonic variety that it offers across its twenty tracks reflects how limitless hybrid beat styles can be conjured in the workshop of the beatmaker's musical mind and subsequently materialised when different technological devices are brought into contact with one another. As a final bid to affirm the relevance of *Hexagrammar*, I address '36 to 62'; I began planning this beat with the Image of hexagram 36, Ming I / Darkening of the Light (䷣):

> The light has sunk into the earth.
> The image of DARKENING OF THE LIGHT.
> Thus does the superior man live with the great mass:
> He veils his light, yet still shines.[109]

To evoke this theme of 'darkening of the light', I take a bright, canopied synth texture from the sound effects of *Final Fantasy VIII* and loop it, repeatedly arresting the original sound's implied decrease in energy to sustain its 'light' through my own 'darkening' intervention so that new sonic details can be heard as the loop continues. The second hexagram represented in the beat's title, Chia Jên / The Family (䷤), bears the Image:

> Wind comes forth from fire:
> The image of THE FAMILY.
> Thus the superior man has substance in his words
> And duration in his way of life.[110]

This Image prompted me to introduce another texture from *Final Fantasy VIII*'s sound effects, namely a 'rain' noise that washes across the stereo field to offer some textural development over the track's duration without interfering with the beat's groove. Indeed, it is in the groove that the beat truly finds its footing, as it responds to the fourth line of hexagram 36 changing from negative to positive:

> Six in the fourth line means:
> He penetrates the left side of the belly.
> One gets at the very heart of the darkening of the light,
> And leaves gate and courtyard.[111]

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[109] Wilhelm and Baynes (trans.), *The I Ching or Book of Changes*, 140.
[110] Ibid., 144.
[111] Ibid., 141.

Against the beat's unsettling textural elements, a bass line with a digital instrument sound taken from samples for a Commodore Amiga MOD file lock into a looping drum break to pierce through the mix and produce what I consider to be the epitome of my 'pan-dimensional funk' scheme as far as *Hexagrammar* goes. The culmination of the production decisions I made for this beat, informed by the readings of the hexagrams, brings about two dialectical musical situations – one of texture versus gesture, and one of lo-fi (from the Amiga bass sound) versus hi-fi (the looping, canopied sound effect). From here, then, I return briefly to the discussion of dialectics in advance of interpreting hip hop beatmaking's history – and potential future – as an unfixed musical technoculture that is characterised by its explosive evasions of standardisation.

Observing the perpetuity of the dialectical impetus, Marx and Engels attest: 'history does not end by being resolved into "self-consciousness" as "spirit of the spirit"'.[112] These are idealistic categories that are finite in character, and therefore not applicable to the reality of history progressing through constant change. Marx and Engels elaborate:

> in each stage [of history] there is found a material result: a sum of productive forces, an historically created relation of individuals to nature and to one another, which is handed down to each generation from its predecessor […] circumstances make men just as much as men make circumstances.[113]

This attitude has guided my study of hip hop beatmaking in that I have found its most salient aspect to be its exposing of a new true, complete meaning of 'technology', that is, one that regards it as a synthesis of noun versus verb, device versus technique, and fixity (thesis, the positive) versus counter-fixity (antithesis, negation). Such a tendency is eminently compatible with the cultural priorities that have prevailed throughout black American history as it involves an extension of signifyin(g), that is, the approach to counter-hegemony entailing disarming and then appropriating objects of fixity that would otherwise restrict the scope of human freedom.

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[112] Karl Marx and Frederick Engels, *The German Ideology*, ed. by C. J. Arthur, (London: Lawrence & Wishart, 1977), 59.
[113] Ibid.

After presenting my research at a hip hop studies conference, covering how hip hop beatmaking practice entails signifyin(g) on technology and how my repurposing of 'retro' video games technology for musical ends reflects this, I was asked if I considered it reasonable to expect hip hop musicians to be able to comprehend and execute such a complex and involved technical approach. While I do not believe that there was any real malice behind the question, it nevertheless reminded me of the exnomination in the critical reception of popular music (particularly forms of electronic music) in general. While white artists and groups are repeatedly lauded by popular music critics for their technical competencies that have resulted in significant musical innovations, I have found acknowledgements of similar accomplishments by their black counterparts to be relatively rare. This tendency can be understood by considering Grandmaster Flash – while he is best known outside of hip hop culture for the early 1980s Sugar Hill hit singles that bear his name, Flash, through his innovations in turntablism technique and committing early hip hop's break-based DJing practice to a record (as opposed to producing tracks through Sugar Hill's favoured approach of using session musicians),[114] is the godfather of creative hip hop beatmaking. Hence, there is a dialectic that is played out in Flash's character as a musician, a union of an A-side and a B-side, where one side is to do with how Flash's name has been co-opted by the culture industry to sell a 'fixed', sanitised version of hip hop music in the form of *product*, a *noun*, and the other represents counter-fixity and a prioritisation of a properly liberated musicality which holds that music is a *process*, a *verb*.

In addition to the way I have drawn from video games technology to demonstrate the creative thrust of beatmaking in my making of *Hexagrammar*, I have found that the dialectic of the culture industry and the underground continuously negating each other to advance hip hop music is illustrated in the video game *Ghettoblaster*, released for the Commodore 64 in 1985.[115] This game sees the player finding tapes of new music, blasting them on the streets from a boombox to get people excited about the new sounds, and

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[114] Grandmaster Flash / Grandmaster Flash And The Furious Five, 'The Adventures Of Grandmaster Flash On The Wheels Of Steel / The Party Mix' (Sugar Hill Records, 1981).

[115] Gibson, Tony and Harrison, Mark, *Ghettoblaster* (London: Virgin Games Ltd., 1985).

then delivering the tapes to a record company's offices so that the music can spread beyond the city, albeit in a commercial form. The setting and object of the game thus resembles a condensed manifestation of the drivers behind hip hop music's history, which in turn has caused a considerable diversification of beatmaking styles as new scenes have emerged with their own novel approaches to composition, informed by – but also, crucially, modifying – the sounds that have proven popular before. The dialectical nature of hip hop beatmaking's development that I have argued for in this thesis constitutes a sprawling extension of the trope of antiphony in that the common musical device of call-and-response is reflected by hip hop music's manifold dualist conflicts and their subsequent resolutions. One such conflict that I regard as vital in hip hop's history is that of the ascendant Southern rap scenes and styles of the mid-to-late 1990s versus the bi-coastal establishment of the genre that had been dominant since the 1980s; a pivotal moment that defined this situation came at the 1995 Source Hip Hop Awards ceremony in New York City, where the Atlanta-based group OutKast accepted the New Artist of the Year award to a chorus of boos from the audience, ostensibly because they were not from either the East or West Coasts and therefore not 'real' hip hop, prompting MC Andre 3000 to get on the microphone to declare: 'I'm tired of […] them closed-minded folks, it's like we got a demo tape but don't nobody want to hear it, but it's like this: the South got somethin' to say, that's all I got to say' – a defiant statement that the group went on to sample on their 1998 track 'Chonkyfire'.[116] From this point, Southern artists and groups consolidated their influence on hip hop at a national, and then international level by introducing musical ideas and devices that reached beyond blueprints such as the East Coast's sample-based 'boom bap' and the West Coast's G-funk. Observing the processes and outputs of beatmakers, it is evident that it is not only 'the south' that has had something to say in response to erroneous statements of orthodoxy and standardisation in hip hop but underground hip hop as a whole, as it continuously offers challenges to fixity by cycling back to the culture's roots, making for a cipher, complete.

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[116] OutKast, 'Chonkyfire', *Aquemini* (LaFace Records, 1998).

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